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BLACKIE'S

COMPREHENSIVE

SCHOOL SERIES

IN OMNIBUS



DISSEMINATUR

FIFTH READER



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BLACKIE'S
COMPREHENSIVE SCHOOL SERIES.

FIFTH READER.



LONDON:
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1880.



PREFACE.

THE special features in these Readers are: (1) They are progressive, comprehensive, and are written in language suitable to the minds of children; (2) They are carefully graduated and systematically arranged.

It is confidently hoped, that the subjects selected will be found such as will foster in the youthful mind a love of reading and a high moral tone of feeling and conduct. Kindness to animals is inculcated in a variety of illustrative instances, so as to strike the mind and impress the memory of the pupil.

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FIFTH READER.

THE HAPPINESS OF ANIMAL LIFE.

1. This world is a happy world after all. The air, the earth, the water teem with delighted existence. In a spring noon or a summer evening, on whichever side I turn my eyes, myriads of happy beings crowd upon my view. The insect youth are on the wing. Swarms of new-born flies are trying their pinions in the air. Their sportive motions, their wanton mazes, their gratuitous activity, their continual change of place, testify their joy, and the exultation they feel in their lately discovered faculties.

2. A bee, amongst the flowers in spring, is one of the most cheerful objects that can be looked upon. Its life appears to be all enjoyment; so busy and so pleased; yet it is only a specimen of insect life with which we are better acquainted than that of others. The whole winged insect tribe, it is probable, are equally intent upon their proper employments.

3. But the atmosphere is not the only scene of enjoyment for the insect race. Plants are covered with aphides, greedily sucking their juices, and constantly, as it would seem, in the act of sucking. It cannot be doubted that this is a state of gratification. What else should fix them

so close to the operation and so long? Other species are running about with an alacrity in their motions which carries with it every mark of pleasure. Large patches of ground are sometimes covered with these brisk and sprightly creatures.

4. If we look to what the waters produce, shoals of the fry of fish frequent the margins of rivers, of lakes, and of the sea itself. They are so happy they do not know what to do with themselves. Their attitudes, their vivacity, their leaps out of the water, their frolics in it, all conduce to show their excess of spirits, and are simply the effects of that excess.

5. The young of all animals appear to receive pleasure simply from the exercise of their limbs and bodily faculties, without reference to any end to be attained, or any use to be answered by the exertions. A child, without knowing anything of the use of language, is in a high degree delighted with being able to speak. Its incessant repetition of a few sounds, or perhaps of a single word which it has learned to pronounce, proves this point clearly. Nor is it less pleased with its first endeavours to walk, or rather to run (which precedes walking), although entirely ignorant of the importance of the attainment to its future life, and even without applying it to any present purpose. A child is delighted with speaking, without having anything to say; and with walking, without knowing where to go. Before learning to walk or speak, the waking hours of infancy are agreeably taken up with the exercise of vision, or perhaps, more properly speaking, learning to see.

6. The great Parent of creation has shown His care for others besides the young. Happiness is found with the purring cat no less than with the playful kitten; in the arm chair of dozing age, as well as in the sprightliness of

the dance, and the animation of the chase. To novelty, to acuteness of sensation, to hope, to ardour of pursuit, succeeds what is in no inconsiderable degree an equivalent



for them all, perception of ease. Herein is the exact difference between the old and the young. The young are not happy but when enjoying pleasures. The old are happy when free from pain. Old age has been well described as an interval of repose between the hurry and the end of life. How far the same cause extends to other animal natures, we cannot say with certainty. The appearance of satisfaction with which most animals, as their activity subsides, seek and enjoy rest, affords reason to believe that this source of gratification is appointed to advanced life under all or most of its various forms.

7. What is seen in different stages of the same life is still more exemplified in the lives of different animals. Animal enjoyments are infinitely diversified. The modes of life to which the organization of different animals respectively determines them are not only of various but opposite kinds. Yet each is happy in its own. For instance, animals of prey live much alone, animals of a milder kind in society. Yet the herring which lives in shoals, and the sheep which lives in flocks, are not more happy in a crowd than is the pike or the lion in the deep solitudes of the pool or the forest. How many myriads of animals are at this moment eating their food, gratifying their appetites, ruminating in their homes, accomplishing their wishes, pursuing their pleasures, taking their pastimes? In each individual how many things must go right for it to be at ease; yet how large a proportion out of every species is so in every assignable instant!—*Paley*.

teem, abound.

pinions, wings.

mazes, intricate movements.

gratuitous, without purpose.

specimen, an example of.

aphides, small green flies.

vivacity, liveliness.

incessant, continual.

exemplified, illustrated by example.

diversified, varied.

animals of prey, those that live by eating other animals.

assignable, possible.

When may the new-born flies be seen? Describe a bee amongst the flowers in spring. Name the insects that suck the juices of plants. What little creatures frequent the margins of rivers and lakes? What is the difference between the enjoyments of youth and age? What sort of animals live much alone?





THE RIVER.

1. River, river! little river!
Bright you sparkle on your way;
O'er the yellow pebbles dancing,
Through the flowers and foliage glancing,
Like a child at play.
2. River, river! swelling river!
On you rush through rough and smooth;
Louder, faster, brawling, leaping,
Over rocks, by rose-banks, sweeping
Like impetuous youth.
3. River, river! brimming river!
Broad and deep, and still as time;

Seeming still, yet still in motion,
Tending onward to the ocean,
Just like mortal prime.

4. River, river! headlong river!
Down you dash into the sea,—
Sea that line hath never sounded,
Sea that sail hath never rounded,
Like eternity. —C. A. Bowles.
-

ANTONY CANOVA.

1. Canova was born in the little Venetian village of Possagno in the year 1757. Falieri the senator was lord of this village. One day he gave a great dinner, and there was served up to his guests the image of a lion beautifully formed in butter. This unexpected dish gave as much surprise to the senator as it did to his numerous guests. He ordered his cook to come up stairs that he might congratulate him in presence of the party, so much pleased was he with the marvellous work of art. The cook was introduced into the banqueting-hall, and was so overwhelmed with congratulations that the tears came into his eyes. "You weep for joy?" said his master to him. "No, my lord," he replied; "it is through despair at not having executed the work of art which is the object of so much admiration." "I should like to make the artist's acquaintance," said the senator.

2. The cook withdrew, assuring his master that his wish would be gratified; and in a few minutes returned leading in the artist. He was a little peasant boy about ten years old, meanly clad, for his parents were poor. Poor

as they were, however, these worthy people had subjected themselves to great straits rather than deny their son lessons in the art of sculpture, which a professor had kindly undertaken to give for a very moderate fee. Antony Canova had early exhibited a strong faculty for statuary. He modelled clay when he could get it, and with the help of his knife carved little figures out of all the chips of wood he could lay his hands on. His parents were acquainted with the cook of senator Falieri. On the morning of the great dinner he came to them to impart the difficulty he had in giving a graceful finish to the table. He had exhausted all the resources of his skill and imagination; but he still wanted one of those effective dishes capable of producing a great sensation, which would tend to establish his reputation as the cook of a great house.

s: The little Canova thought for a minute, and then said, "Do not trouble yourself, I will soon come to you. Leave it to me, and I will answer for it that your table will be complete." The boy went as he had promised to the senator's house, showed the cook the design of the figure which he meant to execute, answered for the success of the attempt, and cut the block of butter with that purity of imagination and perfect taste which he afterwards displayed in cutting blocks of marble. Surprised as the guests had been by the work, they were much more so when they beheld the workman. He was loaded with attentions, and from this time forth Falieri was the patron of the young Canova. The happy result of the first attempt of the little peasant boy suddenly made his name famous, and opened up to him the road to permanent success. Falieri placed him as a pupil in the studio of the best sculptor of the time. Two years after—that is to say, when Canova was only twelve years of age—he sent to his patron a gift of two marble fruit-

baskets of his own workmanship, of remarkable merit, which still adorn the Falieri palace at Venice.

4. In 1780, he removed to Rome, where the greater part of his life was spent. He was very soon acknowledged as the leading sculptor of his age. In 1815, he was appointed by the Roman government to visit Paris to superintend the restitution of the works of art which had been taken by the French from Rome. From Paris he passed over into England, where he was most cordially received.

5. Many of his works are to be seen at Rome. Some very splendid sculptures from his hand are in this country, especially at Chatsworth House in Derbyshire, the princely seat of the Duke of Devonshire. It was while engaged in modelling some decorations for a church which he had built in his native place, that he caught the illness which brought his brilliant life to a close. He died at Venice in October 1822. All the academies of Europe solicited the honour of enrolling him among their members. Kings vied with each other in enriching their national museums with the beautiful products of his genius. He was elected prince-perpetual of the Academy of St. Luke at Rome—a title conferred on no other artist since his death. The funeral ceremony with which his remains were honoured was the grandest which has ever occurred in connection with a professor of the fine arts since the death of Raphael.

Canova, pronounced kä-nō'vā.

Possagno (pos-sän'-yo), a village in Italy in the territory of Venice.

Falieri, pronounced fä-le-ä're.

senator, a member of a governing body, as a senate.

statuary, the art of carving statues.

sculptor, one who carves figures out of marble, &c.

restitution, bringing back.

Raphael, a celebrated Italian artist, died, 1520.

Describe the device by which Canova first showed his genius.

What was his first gift to his patron? Where did he establish himself? For what purpose did he visit Paris? Where can some of his sculptures be seen? Name some of the honours bestowed upon him.

THE GREAT STORM OF 1703.

1. This fearful tempest was preceded by a strong west wind, which set in about the middle of November, 1703; and every day, and almost every hour, increased in force until the 24th, when it blew furiously, occasioned much alarm, and some damage was sustained. On the 25th, and through the night following, it continued with unusual violence. On the morning of Friday, the 26th, it raged so fearfully that only few people had courage to venture abroad. Towards evening it rose still higher. The night setting in with excessive darkness added general horror to the scene, and prevented any from seeking security abroad from their homes, had that been possible.

2. The extraordinary power of the wind created a noise, hoarse and dreadful like thunder, which carried terror to every ear and appalled every heart. There were also appearances in the heavens that resembled lightning. "The air," says a writer at the time, "was full of meteors and fiery vapours; yet," he adds, "I am of opinion that there was really no lightning, in the common acceptation of the term; for the clouds that flew with such violence through the air were not, to my observation, such as are usually freighted with thunder and lightning.

3. Some imagined the tempest was accompanied with an earthquake. "Horror and confusion seized upon all, whether on shore or at sea; no pen can describe it, no tongue can express it, no thought can conceive it, unless theirs who were in the extremity of it; and who, being

touched with a due sense of the sparing mercy of their Maker, retain the deep impression of His goodness upon their minds though the danger be past. To venture abroad was to rush into instant death, and to stay within



afforded no other prospect than that of being buried under the ruins of a falling habitation. Some in their distraction did the former, and met death in the streets; others, the latter, and in their own houses received their final doom." One hundred and twenty-three persons were killed by the falling of dwellings; amongst these were the Bishop of Bath and Wells (Dr. Richard Kidder) and his lady, by the fall of part of the episcopal palace of Wells; and Lady Penelope Nicholas, sister to the Bishop of London, at Horsley, in Sussex. Those who perished in the waters, in the floods of the Severn and the Thames, on the coast of Holland, and in ships blown away and never heard of afterwards, are computed to have amounted to eight thousand.

4. All ranks and degrees were affected by this amazing tempest, for every family that had anything to lose, lost something: land, houses, churches, corn, trees, rivers, all were disturbed or damaged by its fury; small buildings were for the most part wholly swept away, "as chaff before the wind." Above eight hundred dwelling-houses were laid in ruins. Few of those that resisted escaped from being unroofed, which is clear from the prodigious increase in the price of tiles; these rose from twenty-one shillings to six pounds the thousand.

5. About two thousand stacks of chimneys were blown down in and about London. When the day broke, the houses were mostly stripped, and appeared like so many skeletons. The consternation was so great that trade and business were suspended, for the first occupation of the mind was so to repair the houses that families might be preserved from the inclemency of the weather in the rigorous season. The streets were covered with brickbats, broken tiles, signs, and bulks.

6. The lead which covered one hundred churches, and many public buildings, was rolled up and hurled in quantities to distances almost incredible; spires and turrets were thrown down. Innumerable stacks of corn and hay were blown away, or so torn and scattered as to receive great damage.

7. Multitudes of cattle were lost. In one level in Gloucestershire, on the banks of the Severn, fifteen thousand sheep were drowned. Innumerable trees were torn up by the roots; one writer says, that he himself numbered seventeen thousand in part of the county of Kent alone, and that, tired with counting, he left off reckoning.

8. The damage in the city of London only was computed at nearly two millions sterling. At Bristol it was about

two hundred thousand pounds. Altogether it was supposed that the loss was greater than that produced by the great fire of London, 1666, which was estimated at four millions.

9. The greater part of the navy was at sea, and if the storm had not been at its height at full flood, and in a spring tide, the loss might have been nearly fatal to the nation. It was so considerable, that fifteen or sixteen men-of-war were cast away, and more than two thousand seamen perished. Few merchantmen were lost, for most of those that were driven to sea were safe. Rear-admiral Beaumont, with a squadron then lying in the Downs, perished with his own and several other ships on the Goodwin Sands.

10. The ships lost by the storm were estimated at three hundred. In the river Thames only four ships remained between London Bridge and Limehouse, the rest being driven below, and lying there miserably beating against one another. Five hundred wherries, three hundred ship-boats, and one hundred lighters and barges were entirely lost, and a much greater number received considerable damage. The wind blew from the western seas, which preventing many ships from putting to sea, and driving others into harbour, occasioned great numbers to escape destruction.

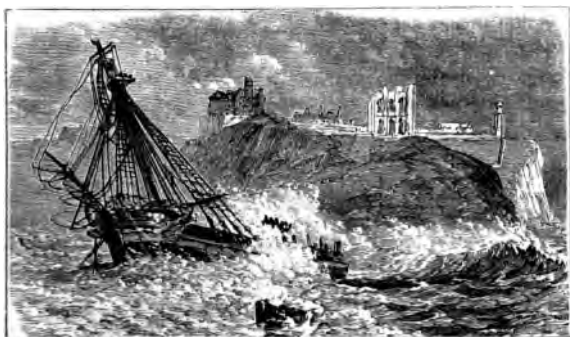
11. The Eddystone Lighthouse, near Plymouth, was precipitated into the surrounding ocean, and with it Mr. Winstanley, the ingenious architect by whom it was contrived, and the people who were with him.—“Having been frequently told that the edifice was too slight to withstand the fury of the winds and waves, he was accustomed to reply contemptuously, that he only wished to be in it when a storm should happen. Unfortunately his desire was gratified. Signals of distress were made, but

in so tremendous a sea no vessel could live, or would venture to put off for their relief."—*Hone's Everyday Book*.

sustained, endured or suffered.
appalled, depressed with fear.
meteors, luminous bodies.
freighted, loaded or burdened.
extremity, termination or end.
afforded, gave.
habitation, dwelling.
affected, deeply moved.
prodigious, vast or very great.
consternation, amazement.
preserved, kept.
inclemency, severe cold.
rigorous, severe.

hurled, thrown violently.
incredible, not to be believed.
squadron, division of a fleet.
The Downs, anchorage ground between the east coast of Kent and the Goodwin Sands.
Goodwin Sands, dangerous sandbanks a few miles off the east coast of Kent.
precipitated, cast down.
ingenious, skilful in invention.
contemptuously, with disdain.
gratified, fulfilled.

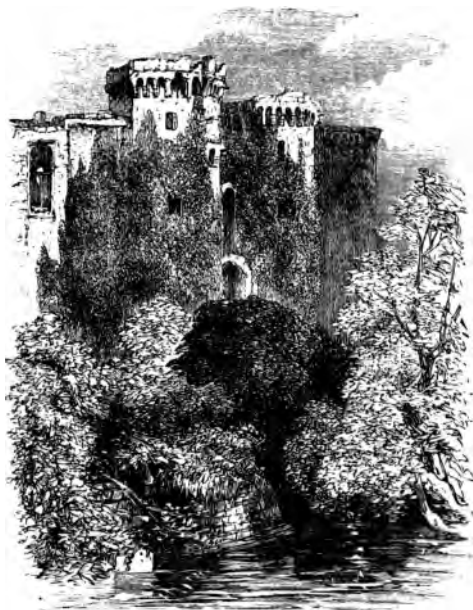
What was the date of the great storm? What added to the horror of the storm on the night of the 26th of November? How did a writer at the time describe the storm? What important persons were killed by the falling of buildings? How many persons are supposed to have perished in the storm? In what manner did persons of all ranks suffer? Describe the appearance in London the morning after. Compare the loss arising from this storm with that produced from the great fire of London. Where was the greater part of the navy at this time? Why were so few merchantmen lost? Who perished on the Goodwin Sands? What lighthouse was precipitated into the surrounding ocean? Who was in it at the time?



THE ENGLISH BOY.

1. Look from the ancient mountains down,
My noble English boy!
Thy country's fields around thee gleam
In sunlight and in joy.
2. Ages have roll'd since foeman's march
Passed o'er that old, firm sod;
For well the land hath fealty held
To freedom and to God!
3. Gaze proudly on, my English boy,
And let thy kindling mind
Drink in the spirit of high thought
From every chainless wind.
4. There, in the shadow of old Time,
The halls beneath thee lie,
Which pour'd forth to the fields of yore
Our England's chivalry.
5. How bravely and how solemnly
They stand midst oak and yew;
Where Cressy's yeoman haply framed
Thy bow, in battle true.
6. And round their walls the good swords hang,
Whose faith knows no alloy,
And shields of knighthood, pure from stain;
Gaze on, my English boy.
7. Gaze where the hamlet's ivied church
Gleams by the antique elm;
Or where the minster lifts the cross
High through the air's blue realm.

8. Martyrs have shower'd their free heart's blood
That England's prayer might rise,
From those gray fanes of thoughtful years,
Unfetter'd to the skies.



9. Along their aisles, beneath their trees,
This earth's most glorious dust,
Once fired with valour, wisdom, song,
Is laid in holy trust.
10. Gaze on—gaze farther, farther yet—
My gallant English boy;
Yon blue sea bears thy country's flag,
The billow's pride and joy.

11. Those waves in many a fight have closed
Above her faithful dead;
That red-cross flag victoriously
Hath floated o'er their bed.
12. They perish'd—this green turf to keep
By hostile tread unstain'd;
These knightly halls inviolate,
Those churches unprofaned.
13. And high and clear their memory's light
Along our shore is set,
And many an answering beacon-fire
Shall there be kindled yet.
14. Lift up thy heart, my English boy,
And pray like *them* to stand,
Should God so summon *thee*, to guard
The altars of the land. —*Mrs. Hemans.*

fealty, faithfulness.

yore, in past years.

chivalry, knights.

Cressy, where a great victory was
won over the French by Edward

III., 1346 A.D.

alloy, evil mixed with good.

antique, ancient.

minster, a cathedral church.

martyr, one who bears witness
to truth by his death.

aisles, passages in a church.

gallant, brave.

knightly, where brave men lived.

inviolate, uninjured.



GRACE DARLING.

1. One of the most perilous but pleasing incidents in humble life, within the present century, was the heroic achievement of Grace Darling. This young woman was born November, 1815, and was the daughter of William Darling, keeper of the lighthouse on the Longstone, one of the Farne Islands off the coast of Northumberland. The Farnes indeed are scarcely islands, being little more than bare and desolate rocks, in most parts very precipitous, and inhabited by little besides sea-fowl; but these rocks are so dangerous to ships passing near that a lighthouse has long been maintained there. Almost shut out from the world in such a spot, Grace Darling saw very little society; yet her parents managed to give her a fair education for a girl in her station. She was described as being "remarkable for a retiring disposition, gentle in aspect, mild and benevolent in character; of a fair complexion and comely countenance, with nothing masculine in her appearance."

2. It was on the 6th of September, 1838, when Grace was nearly twenty-three years of age, that the event took place which has given her celebrity. The *Forfarshire*, a steamer of about 300 tons burthen, John Humble, master, was on her way from Hull to Dundee. She had a valuable cargo, and sixty-three persons on board—the master and his wife, forty-one passengers, and a crew of twenty men. A slight leak, patched up before her departure, broke out afresh when off Flamborough Head, and rendered it difficult to maintain the fires for the engine. She passed between the Farnes and the mainland about six o'clock on the evening of the 5th, and then began to encounter a high sea and a strong north wind. The leak increasing, the engine-fires were gradually

extinguished; and although the sails were then used, they could not prevent the vessel from being driven southward. Wind, rain, fog, and a heavy sea, all beset the hapless vessel at once. About 4 o'clock on the morning of the 6th she struck, bows foremost, on a precipitous part of one of the islands known as Harkar's Rock. Some of the crew and one of the passengers left the ship in one of the boats; two other passengers attempted to throw themselves into the boat, but were drowned. The females on board clustered round the master, shrieking and imploring aid which he could not afford them. A heavy wave, striking the vessel on the quarter, raised her from the rock, and then caused her to fall violently on it again; she encountered a steep ledge, which rent her in twain about midships; the forepart remained on the rock, while the hinder part was carried off by a rapid current through a channel called the Pifa-gut. In this fearful plight the remainder of the passengers and crew awaited the arrival of daylight, no one knowing how soon the waves might destroy them altogether.

3. At daybreak, William Darling descried them from the Longstone, about a mile distant; and it soon became known at Bamborough that a ship had been wrecked. So fearfully did the waves beat against the rocks, that the boatmen at Bamborough refused to go off to render assistance; and Darling, accustomed as he was to scenes of danger, at first shrank from the peril of putting off to the wreck in a boat. His hesitation was overcome by the entreaties of his gentle but heroic daughter. She could see, with the aid of a glass, the sufferers clinging to the wreck; and, agonized at the sight, she urged him to let her go with him in a boat to *endeavour to rescue them*. At last he yielded. The

mother helped to launch the boat into the water, and the father and daughter each took an oar. And so they rowed this fearful mile, at each instant in danger of being swamped by the waves. They reached the wreck and found nine survivors. One of them, a weaver's wife, was found in the fore-cabin, exposed to the intrusion of the sea, and two children lay stiffened corpses in her arms. The whole nine went with Darling and his daughter into the boat, and safely reached the light-house, where, owing to the severity of the weather, they were forced to remain two days, kindly attended to by the three inmates.

4. When the news of this exploit reached the coast, all Northumberland was filled with admiration; and speedily the whole kingdom was similarly affected. Grace Darling became known everywhere, and she herself received attentions from all quarters. Tourists came from all parts to see the Longstone lighthouse, and, still more, to see Grace herself. The Duke and Duchess of Northumberland invited her and her father to Alnwick Castle, and gave her a gold watch; the silver medal of the Shipwreck Institution was awarded to her; and testimonials came from several public bodies. A purse of £700 was presented to her by public subscription; portraits of her were eagerly sought for and purchased; and a manager of a London theatre even offered her a large sum if she would merely sit in a boat on the stage for a few minutes, during the performance of a piece constructed for the occasion. But her modest and retiring disposition revolted from this last-mentioned notoriety. She refused the offer, and throughout the whole of this novel and tempting career she never once departed from her gentle, womanly demeanour. Numerous offers of marriage were made to her, but she accepted none of them; and

continued to reside with her father and mother at the lighthouse. There she died of consumption on the 20th October, 1842, at the early age of twenty-seven, four years after the event which had given her a fame which will be cherished for ages yet to come.

perilous, dangerous.
incidents, events.
achievement, exploit or deed.
desolate, dreary.
precipitous, very steep.
maintained, kept.
benevolent, kind.
extinguished, put out.

rent in twain, broken in two.
descried, saw in the distance.
yielded, consented on entreaty.
intrusion, unwelcome entrance.
exploit, deed of daring.
admiration, wonder and delight.
awarded, given.
demeanour, behaviour, bearing.

Who was Grace Darling? Describe the Farne Islands. What was the character of Grace Darling? When was the *Forfarshire* steamer wrecked? Whither was she bound? Describe what happened after she struck on the rock. Who was the first to see a portion of the wreck early the next morning? Where from? Why was he afraid to go to the help of the survivors? Who ascertained that there were any survivors? How? What did Grace entreat her father to do? Describe what followed. How many were saved? What nobleman invited Grace and her father to his castle? What did he give Grace? How did the public express their gratitude to her? What was the cause of Grace Darling's death? When did she die?

JAPAN.

1. The visit to the capital, Yeddo, was a most interesting treat. The progress already made by the Japanese in establishing railways removes all difficulties in reaching our destination. The seventeen miles between Yokohama and the capital are run over in somewhat less than an hour, although we stop at three or four stations on our way; passing some pretty scenery through garden-bordered streets, and the open country, with rice and

wheat fields everywhere, indicating unmistakably, signs of skilled and careful agriculture.

2. Leaving the streets for the suburbs, showy little cottages, each surrounded by gardens laid out with tasteful neatness and artistic skill, are passed; and so through shady lanes bordered by hedges, with rich and waving foliage, until reaching the inclosure where my vehicle stops. My friend was waiting to receive me, and we



entered the building he occupies, which had at one time been attached to a large temple near at hand, and for which this part of Yeddo is famous.

3. The house appears to have been built in the position it occupies, with a view to the charming prospect it commands. It has broad verandahs running round it, every door and partition sliding backwards and forwards in grooves, instead of opening and shutting in our ordinary way.

4. Entering by the doorway, and passing through a spacious hall, matted according to the government regulation, which prescribes that every mat manufactured throughout the empire shall be of one size, we reach the spacious rooms, the walls and panels of which are ornamented with paintings of various animals and figures—tortoises, cranes, dragons, and wondrous unreal monsters. All the furniture, light, neat, and airy, with lacquer ware, china, and bronzes, gave the entire aspect of the place one of repose.

5. Opening out from the verandah was a well-cultivated garden, where most that was lovely in nature was to be seen; choice flowers and shrubs; ponds in which were gold and silver fish, ever ready to exhibit their lovely tints, amidst water-lilies and other beautiful aquatic plants. This then was to be my home for the next few days.

6. During my stay I made the most of the time at my disposal in sight-seeing, and under the guidance of my host many a pleasant trip was arranged. We did not confine ourselves to visiting the city alone, although the sights to be seen were of the greatest interest, but explored the country for some miles round, where are snug little villages with fertile fields highly cultivated, combining to form scenes of beauty and abundance that can scarcely be conceived.

7. On one occasion, after passing the imperial residence, we ascended one of the highest points of the fortifications in the rear of the castle, from which a fine panoramic view was obtained of the vast city, with its two millions and a half of inhabitants, occupying an area equal to, if not greater than London. Looking in any direction the view was one of beauty; hill and dale clothed with brilliant vegetation of sparkling green. Up the hillsides.

temples tower over the modest houses of the people, and pretty pleasure villas peep forth from the flowers and verdure of the tea gardens.

8. After leaving this, the aristocratic quarter of the city, we went on, passing through streets which seemed interminable, where shops containing miscellaneous assortments of goods, suited to the wants of the population, were to be seen.

9. At last, when somewhat clear of the crowded thoroughfares, we found ourselves traversing pleasant suburban lanes, occasionally passing spacious inclosures, at one time the homes of powerful princes or daimios, some of which are said to have afforded accommodation to as many as ten thousand retainers within their walls.

10. I was filled with feelings of astonishment and delight as we passed through fragrant avenues of peach, cherry, and plum trees in full bloom, over arched bridges spanning the bright blue river that flows through the heart of the city; getting here and there glimpses of the exquisite taste displayed in the gardens and cottages along the roadside. No model estate in England can produce structures in any way comparable with those which adorn the suburbs of Yeddo.

11. These charming little chalets, raising their thatched roofs amid numberless fruit-trees and creepers, were usually surrounded by flower-beds and artificial rockeries, laid out with exquisite taste. Frequently we met men, children, and girls, amiable, winning, and full of gentleness, in light and gauzy costumes; their hair tastefully drawn from off their forehead, and fastened with gold or silver pins in graceful knots on the crown. All seemed happy—talking, laughing, and smiling—their greetings and salutations assailed us wherever we went.—*Cruise of the Challenger.*

Japan, the name given to a cluster of islands situated off the east coast of Asia, and containing about 30,000,000 of inhabitants.

Yeddo, the capital of Japan.

destination, end of journey.

Yokohama, an important seaport in Japan.

indicating, pointing out.

suburbs, outskirts of a town.

vehicle, carriage.

prospect, view.

verandah, open portico.

prescribes, orders.

lacquer ware, a peculiar light ware manufactured by the Japanese out of paper or other vegetable substances.

aquatic, growing in water.

imperial, belonging to the em-
fortifications, defences. [peror.

panoramic, a complete view on all sides.

interminable, without end.

miscellaneous, of many kinds.

assortments, collections.

traversing, crossing.

daimios, governors over districts

formerly held as feudal lords.

accommodation, room for.

astonishment, wonder.

exquisite, very fine.

structures, buildings.

adorn, beautify.

chalet (pronounced shallay), a

Swiss name for a farm house.

artificial, made by art.

Where is Japan? What is the name of the capital? Describe the country between Yokohama and the capital. In what do the Japanese show great taste? What peculiarity is there in the opening of the Japanese doors? What curious regulation in regard to mats is in force in Japan? What ware is Japan noted for? Mention some of the sights to be seen in a Japanese flower garden. What is the population of Yeddo? How much ground does it cover? Describe the view from the fortifications at the back of the imperial residence. Name some of the fruit-trees cultivated by the Japanese. What is a chalet?

JAPANESE TEA-HOUSES.

1. As we travelled farther in the country the cottages became more scattered, but the scenes presented were equally agreeable, reminding us frequently of the lanes in Devonshire and some of the fairest portions of the Isle of Wight.

2. At frequent and short distances along the road were little stalls with tea, the universal beverage, always hot and ready, to quench the thirst of the weary pedestrian.

3. At length we suddenly came upon a little village

embosomed in a wood. Here we stopped for refreshment at one of the tea-houses situated on the edge of a stream, the balconies of the upper room overhanging the water. Entering, we find, through the absence of chairs, sofas, and other requisites, that, if we would rest, we must seat



ourselves, *à la* Japanese, on the clean matting; and joining a party of Japanese ladies and gentleman, with whom my friend was acquainted, we soon became on the most excellent terms. Refreshments had been ordered, and we were invited to join, but my alarm was great when I saw what was spread before us—lacquer bowls containing such odd mixtures: fish, raw and cooked; rice, seaweed and soy; slices of strange-looking materials, whether flesh or fowl, it was difficult to say; vegetables and saki. These dishes the waiters in attendance seemed delighted, with roguish fun, to press on us, apparently for the amusement our wry faces afforded them. It was a hazardous attempt at first, but, after all, some of the dishes were palatable enough.

4. By way of dessert, oranges, apples, pears, and sweets were brought in; so there was no difficulty in satisfying our hunger.

5. Tea and saki were afterwards served by our attendants, and after the long walk we were glad to stretch on the soft matting for repose, while imbibing the pleasant-flavoured tea.

6. Afterwards the dancers, with lute and tom-toms, came tripping in; but they elicited from their musical instruments such discordant sounds that we were glad to take refuge in the balcony, from which point nothing could have been more picturesque than the landscape presented; the hillsides, dotted with temples and tea-houses combining to form a scene of beauty that we could not fail to enjoy.

7. As the evening was closing on us, we took leave of our friends at the tea-house, and retraced our way to Yeddo.—*Cruise of the Challenger.*

s: a tered, spread about.
scenes, views.
beverage, drink.
pedestrian, traveller on foot.
embosomed, surrounded.
balconies, galleries before windows.
requisites, things needful.

palatable, tasteful.
dessert, fruit after dinner.
saki, a Japanese drink.
imbibing, drinking.
elicited, drew forth.
discordant, not musical.
picturesque, pretty.
retraced, went back.

Of what parts of England were the travellers reminded in their journey in Japan? What is to be found at frequent intervals on the Japanese roads? What do they sell at these stalls? Where did the travellers stop for refreshments? What was fixed outside the tea-house windows? What furniture is to be found in these tea-houses? Name some of the refreshments that were served up. What was brought in for dessert? What was served up after dessert? What instruments of music were afterwards played?



THE WANDERER.

1. His raven locks were clustering thick
 Upon his marble brow,
The bloom that tinged his youthful cheek
 No more was seen to glow;
Closed were the eyes that brightly shone,
The soul that beam'd in them was flown.

2. He lay upon his lowly bier,
 But none were by his side
Of those he loved, to shed a tear,
 Or bless him when he died;
His home was o'er the dark blue wave,
In the land where dwelt the free and brave.

3. Beneath the cold, cold turf, unknown,
The youthful wanderer sleeps;
No mournful form strays there alone,
Or o'er his ashes weeps;
But on his grave grow wild flowers fair,
Which stranger hands have planted there.
 4. Pale shall be many a blooming cheek,
And tears from bright eyes roll,
And silent looks alone shall speak,
The anguish of the soul
Of those he loved, in days to come,
When the wandering youth returns not home.
—*Stephen Wilson.*
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THE HARVEST OF THE SEA.

1. The sea is more abundantly stocked with living creatures than the land. In all parts of the world a rocky and partially protected shore perhaps supports, in a given space, a greater number of individual animals than any other station. The sea is filled with animals of several kinds, and each layer of water in depth seems to have its own varieties, thus resembling the changes which take place according to elevation in the organized portions of the land.

2. The animals are among the mightiest and among the smallest. There are swimming mammals, as whales, seals, and walruses; there are fishes of various kinds and sizes, crustaceans, soft or jelly fishes, the molluscs, down to those creatures resembling live plants—the zoophytes or corallines, which partake of the qualities of plants and animals. All these are peculiar to the sea or to the fresh waters; and the ocean has its marine plants—sea-weeds

which remain growing on the ground-shoals or rise to the surface and then float.

3. Pliny enumerated but 94 species of fish; Linnaeus increased the number to 478, but recent naturalists have described over 13,000 species, one-tenth of which confine themselves to the fresh waters.

4. The human race derives almost incalculable benefits from them, as is evidenced by the extent and value of the river, coast, and sea fisheries of the world.

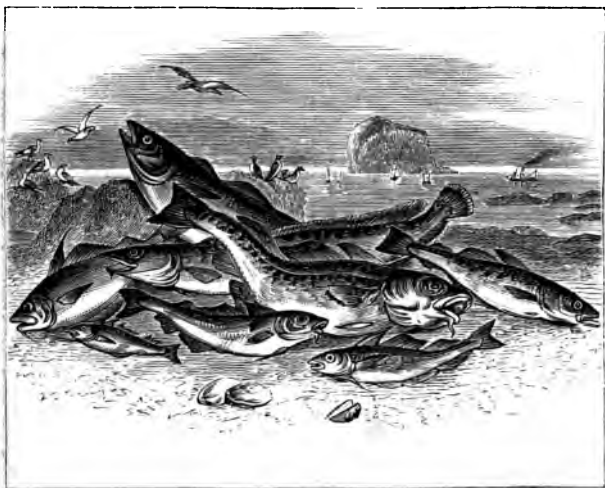
5. The harvest of the sea has not yet been attended to and garnered to the same extent as that of the land. Some nations, as the Chinese, have, it is true, long given close attention to the profitable utilization of its commercial products, and several European nations and the Americans have also prosecuted certain fisheries; but systematic and scientific management has only of late years been specially directed to the various branches.

6. That the supply of fish is most abundant and indeed inexhaustible on all our coasts has never been called in question. This harvest is ripe for gathering at all seasons of the year without the labour of tillage and without expense of seed or manure.

7. In spite, however, of this large supply of wholesome, palatable, and nutritious food, yielded by the surrounding seas of Great Britain, every acre of which is infinitely more productive than the same quantity of the richest land; notwithstanding that these salt-water fields are perpetually "white to the harvest," it is a remarkable fact that, in the inland and middle counties of England, the labouring classes scarcely know the taste of fish. Of late years it has even become a scarce article in some of the maritime counties.

8. Formerly salmon whilst in season was the common food of all ranks in the northern counties bordering on

the sea, and in most parts of Wales, and what could not be used fresh was salted for winter consumption; there was scarcely a family in the neighbourhood of a seaport



or salmon fishery that did not lay up a supply of pickled salmon for the winter.

9. The produce of the sea around our coasts bears a far higher proportion to that of the land than is generally imagined. The most frequented fishing grounds are much more prolific of food than the same extent of the richest land.

10. Once in the year an acre of good land carefully tilled produces a ton of corn, or two or three hundred-weights of meat or cheese. The same area at the bottom of the sea, on the best fishing grounds, yields a greater weight of food to the persevering fisherman every week in the year. Five vessels belonging to the same owner,

in a single night's fishing have brought in 17 tons weight of fish, an amount of wholesome food equal in weight to that of 50 cattle or 300 sheep. The ground which these vessels covered during the night's fishing could not have exceeded an area of 50 acres.

11. It has been supposed that nearly a tenth of the population of China derive their means of support from the fisheries. Hundreds and thousands of boats crowd the whole coasts, sometimes acting in communities, sometimes independent and isolated. There is no species of craft by which a fish can be inveigled which is not practised with success in China. Every variety of net, from vast seines embracing miles, to the smallest hand-filet in the care of a child; fishing by night and fishing by day; fishing in moonlight, by torchlight, and in utter darkness; fishing by those who are stationary on the rock by the seaside, and by those who are absent for weeks on the wildest of seas; fishing by cormorants; fishing by divers; fishing with lines, with baskets, by every imaginable decoy and device. There is no river which is not staked to assist the fisherman in his craft. There is no lake, no pond, which is not crowded with fish. A piece of water is nearly as valuable as a field of fertile land. At daybreak every city is crowded with sellers of live fish, who carry their commodity in buckets of water, saving all they do not sell to be returned to the pond or kept for another day's service.—*Commercial Products of the Sea.*

stocked, filled.
varieties, species, classes.
mammals, animals that suckle
their young.
crustaceans, shell-covered marine
animals.
zoophytes, animal plants.

Pliny was a celebrated Roman, and a great naturalist. He wrote a "Natural History" treating of all the sciences; this he divided into 37 books. Whilst commanding a Roman fleet in the Bay of Naples he

observed a great cloud over Mount Vesuvius, and landed to examine it, but was destroyed by the sulphurous vapours from the burning lava, A.D. 79.

enumerated, numbered, reckoned.
Linnaeus was a great Swedish naturalist, who died in the year 1778.

naturalist, one who studies nature.

evidenced, proved.

garnered, stored up.

utilization, use.

systematic, according to plan.

inexhaustible, never failing.

tillage, digging or ploughing.

palatable, tasteful.

nutritious, nourishing.

perpetually, always.

maritime counties, counties that touch the sea.

consumption, supply.

prolific, fruitful.

communities, companies.

isolated, separate, distinct.

inveigled, enticed, decoyed.

seines, long nets used in sea-fishing.

In what parts of the sea are the greatest number of animals found? What great swimming beasts are found in the sea? What is a crustacean? What is a zoophyte? Who was Pliny? How many species did he enumerate? Who was Linnaeus? How many species did he enumerate? How many are described by naturalists at the present day? In what does the harvest of the sea differ from that of the land? In ancient times what fish was very common as food in England? How was it preserved for winter use? What will an acre of ground produce per annum? What food will an acre of water produce in a week? What weight of food was caught in a single night by five vessels? What part of the population of China is supported by the fisheries? Describe some of the modes of taking fish used by the Chinese. What bird is used for fishing in China? How does the Chinese fish merchant take his fish about?



THE EARLY LIFE OF DR. KITTO.

1. On the 4th of December, 1804, a feeble, sickly child was born in an obscure street in Plymouth, known as "Seven Stars Lane." The child's home was a poor and wretched one, and made so by the habitual drunkenness of the father. Money, comfort, character, self-respect, and everything that men should value most,—all had been thrown away to gratify his strong craving for drink. The mother's heart was almost broken, her life made miserable, her home dreary, and her poor, sickly first-born son was left to grow up as best he could amid these scenes of misery and degradation. This child's name was John Kitto.

2. When only four years old, the boy was taken from this wretched home to the garret of his poor, but kind and good grandmother. She nursed and tended her feeble grandson with all a mother's care and tenderness, and deprived herself of many comforts for his sake. In her loved company the little boy strolled through the lanes and fields, gathering flowers and fruit, or wandered along the sea-beach, watching the waves, thus strengthening his feeble constitution.

3. At eight years of age he was sent to school, but his attendance was very irregular. Bad health often prevented his going to school, but the chief cause of absence was his grandmother's inability to pay the few pence required for his fee. He was first at one school, and then at another; and, as usual in such cases, he learnt but little.

4. But his loving grandmother did what she could to teach and interest the boy. She told him all the stories and fairy tales she could think of, and a lively shoemaker, named Roberts, who lived under the same roof,

added to the store of the child's knowledge by giving him an account of Bluebeard, Cinderella and her glass slipper, Jack the Giant-Killer, and Beauty and the Beast. In after years, when grown to manhood, he says, "Assuredly never have I since felt so much respect and admiration of any man's talents and extent of information as those of poor Roberts."

5. The young listener was charmed. His childish delight was greatly increased by the discovery that these



tales were not only traditions which he could listen to from the lips of his grandmother and the kind-hearted shoemaker, but actual stories to be seen in print in Mrs. Barnicle's shop window in Plymouth, and that they might be purchased for a few pence. This discovery first awakened his love for reading. Every spare penny was gladly devoted to the purchase of books.

6. Then having exhausted his home supply, the eager child began to borrow books from his neighbours, and very speedily all the books in the street in which he lived had passed through his hands.

7. But this brief period of sunshine and joy soon came to an end. When only in his tenth year, his grandmother was obliged, by increasing poverty and infirmity, to break up her small home and live with her youngest daughter, the mother of John Kitto. Sadly, and to his own bitter grief, the poor, sickly, book-loving child had to return to a home darkened and degraded by a drunken father.

8. His work now was to assist his father in his trade as a mason. Such an occupation was ill suited to his health or his tastes. He found his chief pleasure during his scant leisure hours in solitary rambles, and in reading in his wretched bed-chamber at the top of the house all the books he could lay hands on. To this sad and sickly boy, in such a cheerless home, life seemed dreary and desolate indeed.

9. For two long weary years he thus worked with his father, until a shocking accident happened to him which turned the course of his whole life. He had just entered upon his twelfth year, when one afternoon, as the slim and ragged boy was carrying a load of slates to the roof of a house, while stepping from the ladder to the roof, he lost his footing, and fell a distance of thirty-five feet into the court beneath.

10. Life indeed was spared, but only after a long and weary illness. His sense of hearing was entirely extinguished. Never again, during the remaining thirty-eight years of his life, did he hear a single sound. From that eventful day the sound of no human voice ever gladdened his heart.

11. Could any situation more hopeless than his be conceived? If he could do but little before to help his father, he could do less now. Several means of obtaining a living were attempted, but all failed. He found his one refuge and joy in books. But the gloom was deepening around

the matter with my eyes? I here leave off this journal till some other change or extraordinary misfortune takes place."

18. From six in the morning until ten at night, the forlorn and friendless boy was compelled to work for his cruel taskmaster. No time was left for his loved books, except such as could be snatched from his much-needed sleep. No wonder he was almost broken-hearted.

19. At last relief came. As the poor workhouse boy had been apprenticed to Bowden with the consent of the magistrates, the complaints of the apprentice were brought before these magistrates. Unable by reason of his deafness to plead his case by word of mouth, he used his pen to put his case before the bench. So well did he use that pen, so fluently did he write out his statements, that the gentlemen who were trying the case were surprised and delighted. They could not imagine whence a poor, deaf workhouse apprentice could have learned to express his thoughts so clearly and so powerfully. They granted his release, and sent the poor boy back again to the workhouse.

20. The cruel treatment of Bowden had awakened the boy to a new sense of power—to a new life. He had discovered what a mighty force might be wielded by the pen. New hopes sprung up in his heart; new views of life opened out before him. His case now had become known. His appearance before the magistrates had brought him into notoriety. A few friends raised a subscription for him, obtained his discharge from the workhouse, and placed him in a position where he might indulge more freely his love of reading and study.

21. Right nobly did John Kitto make use of his new opportunities. After a short residence at Exeter as apprentice to Mr. Grove, a dentist, he entered the service

of the Church Missionary Society, and after careful preparation for his work at the Missionary College in Islington, he went out to Malta as superintendent of the printing department, and resided there eighteen months.

22. On his return to England he found his kind and noble-hearted friend, Mr. Grove, preparing to go out as missionary to the East, and he at once agreed to go with him as tutor to his children. He went to Bagdad, remaining there nearly three years. During his residence in that city, Kitto obtained that intimate acquaintance with eastern customs and manners which gave such a special value to the important work which he published after his return home—his well-known Pictorial Bible. This valuable work was completed in 1838, and it once became very popular, and has since been several times reprinted. He published several other works, chiefly illustrative of the book he loved above all others—the Bible. His *Daily Bible Illustrations* was his last and most popular work, and was dedicated to our gracious Queen Victoria. Thus by patient perseverance and uniring industry, the deaf, forlorn workhouse boy raised himself to such a position that the Queen graciously accepted his offer of a dedication. In 1844 the University of Giessen in Germany gave him the title of Doctor of Divinity—a title very seldom given to any layman. But at last the strain of excessive work, the natural weakness of his constitution, and the shock of family bereavement, proved too much for him, and he died at Cannstadt in Germany on Nov. 25th, 1854, in his fiftieth year. His life was a long and continual struggle against poverty, deafness, and ill-health; but he gained the victory, and rose to a position not only of eminence, but of usefulness, enriching the world by his books, and still more by his noble God-fearing life.—*Dr. Eadie's Life of Dr. Kitto.*

habitual, constant, customary.
degradation, painful and miserable condition.

scant, short.
spectacle, sight.
probationary, relating to testing.
exultingly, proudly.
disable, prevent.
futile, useless, to no purpose.
indignities, insults.

bench, a name given to magistrates when sitting in judgment.

fluently, with ease.
wielded, exercised with power.
notoriety, publicity.

Bagdad, a large city in Asiatic Turkey on the banks of the river Tigris.

bereavement, loss by death.

Where was John Kitto born? What kind of a home had he? By whom was he brought up? What kind of education did he receive? What made him think very highly of Mr. Roberts? What did he find in Mrs. Barnicle's shop-window? What was his first occupation? What terrible accident happened to him? What sad result did it leave behind? How did he obtain admission into Plymouth work-house? Who acted as a friend to him while there? Describe his apprenticeship. How did he obtain relief? What was the effect of his pleading before the magistrates? Into what society's service did he enter? To what place was he first sent in the service of that society? Under what circumstances did he go to Bagdad? What did he specially become acquainted with while there? What was his first publication? What was his last, and to whom was it dedicated?

THE MOTHER WHO HAS A CHILD AT SEA.

1. There's an eye that looks on the swelling cloud,
 Folding the moon in a funeral shroud:
 That watches the stars dying one by one,
 Till the whole of heaven's calm light has gone.
 There's an ear that lists to the hissing surge,
 As the mourner turns to the anthem dirge;
 That eye! that ear! oh, whose can they be,
 But a mother's who hath a child at sea?
2. There's a cheek that is getting ashy white,
 As the tokens of storm come in with the night;

There's a form that's fixed at the iattice pane,
To mark how the gloom gathers over the main;
While the yeasty billows lash the shore
With loftier sweep, and hoarser roar.
That cheek! that form! oh, whose can they be,
But a mother's who hath a child at sea!



3. The rushing whistle chills her blood,
As the north wind hurries to scourge the flood:
And the icy shivers spread to her heart,
As the first red lines of lightning start.
The ocean boils! all mute she stands,
With parted lips and tight clasp'd hands;
Oh! marvel not at her fear—for she
Is a mother who hath a child at sea.
4. She conjures up the fearful scene
Of yawning waves, where the ship between,
With striking keel and splinter'd mast,
Is plunging hard and foundering fast.

She sees her boy, with lank, drenched hair,
 Clinging on to the wreck with a cry of despair—
 Oh! the vision is maddening—no grief can be
 Like a mother's who hath a child at sea.

5. She pressed her brow, she sinks and kneels;
 While the blast howls on, and the thunder peals;
 She breathes not a word, for her passionate prayer
 Is too fervent and deep for the lips to bear:
 It is pour'd in the long convulsive sigh,
 In the straining glance of an upturn'd eye:
 And a holier offering cannot be
 Than a mother's prayer for her child at sea.
6. Oh! I love the winds when they spurn control,
 For they suit my own bond-hating soul;
 I like to hear them sweeping past,
 Like the eagle's pinions, free and fast:
 But a pang will rise, with sad alloy,
 To soften my spirit, and sink my joy,
 When I think how dismal their voices must be
 To a mother who hath a child at sea!

shroud, death dress.
surge, a large wave.
anthem, hymn.
dirge, funeral song.
yeasty, frothy.
mute, silent.
conjures, imagines.
keel, bottom of a ship.
foundering, sinking.

lank, drooping.
fervent, eager.
convulsive, with emotion.
spurn, reject with disdain.
control, restraint.
pinions, wings.
alloy, mixture of evil with
 good.
dismal, doleful, dreary.





THE JAGUAR'S CAVE.

AN ADVENTURE AMONG THE QUITO MOUNTAINS.

1. On leaving the Indian village, we continued to wind round the wide base of Chimborazo; but its snow-crowned head no longer shone above us in clear brilliancy, for a dense fog was gathering gradually around it. Our guides looked anxiously towards it, and announced their apprehensions of a violent storm. We soon found that their fears were well-founded. The fog rapidly covered and obscured the whole of the mountain; the atmosphere was suffocating, and yet so humid that the steel work of our watches was covered with rust, and the watches stopped. The thunder at length began to roll, and resounded through the mountainous passes with the most terrific grandeur. Then came the vivid lightning,—flash following flash—above, around, beneath,—everywhere a sea of fire.

2. We sought a momentary shelter in a cleft of the rocks, whilst one of our guides hastened forward to seek a more secure asylum. In a short time he returned and informed us that he had discovered a spacious cavern which would afford us sufficient protection from the elements. We proceeded thither immediately, and with considerable difficulty at last reached it. The noise and raging of the storm continued with so much violence that we could not hear the sound of our own voices. I had placed myself at the entrance of the cave, and could observe, through the opening which was straight and narrow, the singular scene without. The highest cedar trees were struck down, or bent like reeds; monkeys and parrots lay strewn upon the ground, killed by the falling branches; the water had collected in the path we had just passed, and hurried along it like a mountain stream. From everything I saw, I thought it extremely probable that we should be obliged to pass some days in the cavern.

3. When the storm, however, had somewhat abated, our guides ventured out in order to ascertain if it were possible to continue our journey. The cave in which we had taken refuge was so extremely dark, that if we moved a few paces from the entrance, we could not see an inch before us; and we were debating as to the propriety of leaving it even before they returned, when we suddenly heard a singular groaning or growling in the further end of the cavern which instantly fixed our attention.

4. Wharton and myself listened anxiously, but our daring and inconsiderate young friend Lincoln, together with my huntsman, crept about on their hands and knees, and endeavoured to discover by groping from whence the sound proceeded. They had not advanced far into

the cavern before we heard them utter an exclamation of surprise; and they returned to us each carrying in his arms an animal singularly marked, and about the size of a cat, seemingly of great strength and power, and furnished with immense fangs. The eyes were of a green colour; strong claws were upon their feet; and a blood-red tongue hung out of their mouths. Wharton had scarcely glanced at them when he exclaimed in consternation, "we have come into the den of a" — He was interrupted by a fearful cry of dismay from our guides, who came rushing precipitately towards us calling, "A jaguar! a jaguar!" and at the same time with extraordinary rapidity they climbed up a cedar tree which stood at the entrance of the cave, and hid themselves among the branches.

5. After the first sensation of horror and surprise, which rendered me motionless for a moment, had subsided, I grasped my fire-arms. Wharton had already regained his composure and self-possession, and he called to us to assist him instantly in blocking up the mouth of the cave with an immense stone which fortunately lay near it. The sense of approaching danger augmented our strength, for we now distinctly heard the growl of the ferocious animal, and we were lost if it reached the entrance before we could get it closed. Ere this was done we could distinctly see the jaguar bounding towards the spot, and stooping in order to creep into his den by the narrow opening. At this fearful moment our exertions were successful, and the great stone kept the wild beast at bay. There was a small open space, however, left between the top of the entrance and the stone, through which we could see the head of the animal, illuminated by its glowing eyes which it rolled, glaring with fury upon us. Its frightful roaring, too, penetrated to

the depths of the cavern, and was answered by the hoarse growling of the cubs which Lincoln and Frank had now tossed from them.

6. Our ferocious enemy attempted first to remove the stone with his powerful claws, and then to push it with his head from its place; and these efforts proving abortive, served only to increase his wrath. He uttered a tremendous, heart-piercing howl, and his flaming eyes darted light into the darkness of our retreat. "Now is the time to fire at him," said Wharton, with his usual calmness. "Aim at his eyes; the ball will go through his brain, and then we shall have a chance to get rid of him." Frank seized his double-barrelled gun, and Lincoln his pistols. The former placed the muzzle within a few inches of the jaguar, and Lincoln did the same. At Wharton's command they both drew their triggers at the same moment, but no shot followed. The jaguar, who seemed aware that the flash indicated an attack upon him, sprang growling from the entrance; but feeling himself unhurt, immediately turned back again, and stationed himself in his former place.

7. The powder in both pieces was wet; they therefore proceeded to draw the useless loading whilst Wharton and myself hastened to seek our powder flask. It was so extremely dark that we were obliged to grope about the cave; and at last, coming in contact with the cubs, we heard a rustling noise as if they were playing with some metal substance, which we soon discovered was the cannister we were looking for. Most unfortunately, however, the animals had pushed off the lid with their claws, and the powder had been strewed over the damp earth, and rendered entirely useless. This horrible discovery excited the greatest consternation. "All is over," said Wharton; "we have only now to choose whether we

shall die of hunger together with these animals who are shut up along with us, or open the entrance to the blood-thirsty monster without, and so make a quicker end of the matter."

8. So saying he placed himself close beside the stone which for a moment defended us, and looked undauntedly upon the lightning eyes of the jaguar. Frank took a piece of strong cord from his pocket, and hastened to the farther end of the cave, I knew not with what design. We soon, however, heard a low stifled groaning; and the jaguar, who had heard it also, became more restless and disturbed than ever. He went backwards and forwards before the entrance of the cave in the most wild and impetuous manner—then stood still, and stretching out his neck in the direction of the forest, broke forth into a deafening howl. Our two guides took advantage of this opportunity to discharge several arrows from the tree. He was struck more than once; but the light weapons bounded back harmless from his thick skin. At length one of them struck him near the eye, and the arrow remained sticking in the wound. He now broke anew into the wildest fury, sprang at the tree, and tore it with his claws as if he would have dragged it to the ground. But having at length succeeded in getting rid of the arrow, he became more calm, and laid himself down as before in front of the cave.

9. Frank now returned from the lower end of the den, and a glance showed us what he had been doing. In each hand, and dangling from the end of a string, were the two cubs. He had strangled them; and before we were aware what he intended, he threw them through the opening to the jaguar. No sooner did the animal perceive them than he gazed earnestly upon them, and began to examine them closely, turning them cautiously from side

to side. As soon as he became aware that they were dead, he uttered so piercing a howl of sorrow that we were obliged to put our hands to our ears. When I upbraided my huntsman for the cruel action he had so rashly committed, I perceived by his blunt and abrupt answers that he also had lost all hope of rescue from our impending fate, and that under these circumstances the ties between master and servant were dissolved. For my own part, without knowing why, I could not help believing that some unexpected assistance would yet rescue us from so horrible a fate. The thunder had now ceased, and the storm had sunk to a gentle gale; the songs of birds were again heard in the neighbouring forest, and the sunbeams sparkled in the drops that hung from the leaves. We saw through the aperture how all nature was reviving after the wild war of elements which had so recently taken place; but the contrast only made our situation the more horrible. We were in a grave from which there was no deliverance; and a monster worse than the fabled Cerberus kept watch over us.

10. The jaguar had laid himself down beside his whelps. He was a beautiful animal of great size and strength, and his limbs being stretched out at their full length, displayed his immense power of muscle. A double row of great teeth stood far enough apart to show his large red tongue, from which the white foam fell in drops. All at once another roar was heard at a distance, and the jaguar immediately rose and answered it with a mournful howl. At the same instant our guides uttered a shriek, which announced that some new danger threatened us. A few moments confirmed our worst fears, for another jaguar not quite so large as the former came rapidly towards the spot where we were. "This enemy will prove more cruel than the other," said Wharton,

"for this is the female, and she knows no pity for those who deprive her of her young." The howls which she gave when she had examined the bodies of her cubs surpassed everything horrible that we had yet heard; and the male jaguar mingled his mournful cries with hers. Suddenly her roaring was lowered to a hoarse growling, and we saw her anxiously stretch out her head, extend her wide and smoking nostrils, and look as if she were determined to discover immediately the murderers of her young. Her eyes quickly fell upon us, and she made a spring forward with the intention of penetrating to our place of refuge. Perhaps she might have been enabled by her immense strength to push away the stone had we not, with our united power, held it against her. When she found that all her efforts were fruitless, she approached the jaguar which lay stretched out beside the cubs, and he rose and joined in her hollow roarings.

11. They stood together for a few moments as if in consultation, and then suddenly went off at a rapid pace, and disappeared from our sight. Their howling died away in the distance, and then entirely ceased. We now began to entertain better hopes of our condition; but Wharton shook his head, "Do not flatter yourselves," said he, "with the belief that these animals will let us escape out of their sight till they have had their revenge. The hours we have to live are numbered." Nevertheless there still appeared a chance of our rescue, for to our surprise we saw our guides standing before the entrance, and heard them call to us to seize the only possibility of our yet saving ourselves by instant flight, for that the jaguars had only gone round the height to seek another inlet to the cave, with which they were no doubt acquainted. In the greatest haste the stone was pushed aside, and we stepped forth from what we had considered

a living grave. Wharton was the last who left it; he was unwilling to lose his double-barrelled gun, and stopped to take it up; the rest of us thought only of making our escape. We now heard once more the roaring of the jaguars, though at a distance; and following the example of our guides, we precipitately struck into a side path. From the number of roots and branches of trees with which the storm had strewn our way, and the slipperiness of the road, our flight was slow and difficult. Wharton, though an active seaman, had a heavy step, and had great difficulty in keeping pace with us, and we were often obliged to slacken our own on his account.

12. We had proceeded thus for about a quarter of an hour, when we found that our way led along the edge of a rocky cliff with innumerable fissures. We had just entered upon it, when suddenly the guides, who were before us, uttered one of their piercing shrieks, and we immediately became aware that the jaguars were in pursuit of us. Urged by despair, we rushed towards one of the breaks or gulfs in our way, over which was thrown a bridge of reeds that sprang up and down at every step. Deep in the hollow below rushed an impetuous stream, and a thousand pointed and jagged rocks threatened destruction on every side. Lincoln, my huntsman, and myself, passed over the chasm in safety; but Wharton was still in the middle of the waving bridge, and endeavouring to steady himself, when both jaguars were seen to issue from the adjoining forest; and the moment they descried us, they bounded towards us with dreadful roaring. Meanwhile Wharton had nearly gained the safe side of the gulf, and we were all clambering up the rocky cliff except Lincoln, who remained at the reedy bridge to assist his friend to step upon firm ground. Wharton, though the ferocious animals were close upon

him, never lost his courage or presence of mind. As soon as he had gained the edge of the cliff he knelt



down, and with his sword divided the fastenings by which the bridge was attached to the rock.

13. He expected that an effectual barrier would thus be put to the further progress of our pursuers, but he was mistaken, for he had scarcely accomplished his task when the female, without a moment's pause, rushed towards the chasm, and attempted to bound over it. It was a fearful sight to see the mighty animal suspended for a moment in the air above the abyss; but the scene passed like a flash of lightning. Her strength was not equal to the distance; she fell into the gulf, and before she reached the bottom she was dashed to pieces by the jagged points of the rocks. Her fate did not in the least

dismay her companion. He followed with an immense spring, and reached the opposite side, but only with his fore claws; and thus he clung to the edge of the precipice endeavouring to gain a footing. The guides again uttered a wild shriek as if all hope was lost. But Wharton, who was nearest the edge of the rock, advanced courageously towards the jaguar and struck his sword into the animal's breast. Enraged beyond measure, the wild beast collected all his strength, and with a violent effort, fixing one of his hind legs upon the edge of the cliff, he was about to spring upon Wharton, when Lincoln, who was already at his side, seized Wharton's gun which lay near upon the ground, and struck so powerful a blow with the butt end upon the head of the jaguar, that the animal, stunned and overpowered, let go his hold and fell back into the abyss.—*From the Danish.*

jaguar, American tiger.

Chimborazo, a very lofty mountain in the Andes, on the W. side of S. America.

apprehensions, fears, forebodings.

obscured, darkened, hid.

asylum, refuge.

spacious, roomy.

consternation, horror.

augmented, increased.

penetrated, reached.

abortive, in vain, fruitless.

indicated, pointed out.

upbraided, reproved.

rescue, deliverance.

Cerberus, a dog with three heads, supposed in ancient fable to guard the entrance into the lower regions.

precipitately, hurriedly.

fissures, narrow openings.

descried, saw in the distance.

Where did this incident take place? What signs foretold the approaching storm? Where did they take refuge? What was found in the cave? How were they protected from the attack of the jaguar? What prevented the guns from firing? What had become of their powder? How did they escape at last?



A BLIND BOY'S SONG.

1. Oh! tell me the form of the soft summer air,
That tosses so gently the curls of my hair!
It breathes on my lip, and it fans my warm cheek,
Yet gives me no answer, tho' often I speak.
I feel it play o'er me, refreshing and kind,
Yet I cannot touch it—I'm blind! Oh! I'm blind!
 2. And music, what is it? and where does it dwell?
I sink, and I mount, with its cadence and swell;
While touch'd to my heart with its deep thrilling strain,
Till pleasure, till pleasure is turning to pain.
What brightness of hue is with music combined?
Will any one tell me? I'm blind! Oh! I'm blind!
 3. The perfumes of flowers that are hovering nigh,
What are they? On what kind of wings do they fly?
Are not they sweet angels, who come to delight
A poor little boy, that knows not of sight?
The sun, moon, and stars are to me undefined,
Oh! tell me what light is! I'm blind! Oh! I'm blind!
- Hannah F. Gould.*

SPRING FLOWERS.

1. See what gems nestle beneath the spring woods!
Here, half buried among the tender moss, lies the snow-
drop, whose blossoms, fearless of the biting mornings
and the rough blasts, come forth to tell that winter is
passing away. How we welcome this little symbol of
hope, this harbinger of sunny days! How we love it for
its fine contrast of pure white and bright green, so grate-
ful to the human eye, but most of all for its coming in

a season of gloom, when all the other children of the hedgerow and woodland are buried in the cold ground!

2. There is no flower whose beauty is more touching than this. It is the emblem of purity and endurance



in the midst of adversity. It is so frail, you would fancy its leaves must soon be withered and its flowers scattered; but the Great Being who made it, and sent it forth to gladden the eye and soothe the heart of man, bathes it with the clear dew, warms it with the soft sunshine, and tenderly folds up its leaves when the coming storm would injure it. So nicely has He hung its bell upon the flower-stalk that it moves with the *winds in every direction* without fear of snapping; and

while He has made the pure white of the blossom act as a reflector, throwing the scanty light and heat which the season affords upon the tender germ within, He has enabled the flower by its pendent position to shake off all hurtful moisture.

3. Of course you are all acquainted with the daisy, and know with what profusion it is scattered over every hill and meadow, and every roadside. No doubt some of you think that its pretty head forms but one flower; but you are mistaken, it is formed of hundreds. Each of the white rays of the margin, and each of the yellow tubes of the centre, is a distinct flower in itself. Of course you know that the daisy, like the snowdrop, is one of the firstlings of the spring. But, unlike the snowdrop, it remains blooming through the summer, through the autumn, and even, if it be mild, through the winter; so that it is in reality the pet of all the seasons. Everybody loves the daisy for its beauty and modesty. It is the most common of plants, but this only seems to add to it an additional charm, and to blend with it a thousand pure emotions. It brings before us the long sunny days of childhood, the racing and tumbling in the meadows, the rambles on hillside and riverside, and delightful sports which we can enjoy no more.

4. Let us descend into yonder dell. Look how the hand of spring has been at work! The ground is so hidden beneath the clustering primroses that we can scarcely see the grass for them. No other plant, except the daisy, recalls so many pleasant memories of childhood. It is the favourite of the schoolboy, and is often associated in fancy with a thatched hillside cottage, with a troop of rosy children before it, pelting each other with handfuls of its blossoms. It is considered emblematical of youth, *and from its bright and delicate nature, and*

its misfortune to be often nipped in the bud, it is invested by poets with rather a mournful character. There are five species of the flower growing wild in this country, of which the oxlip and cowslip are two, but the universal favourite is the common primrose. It is named primrose on account of its early appearance, from a Latin word meaning the first.

5. But what a delightful scent floats around us! What can it be? If you look into that sheltered nook you will find a cluster of violets. Sweet little buds! Slight is their form, and lowly is their bed, and their eyes are bent meekly towards the earth, but they attract our attention and excite our love far more than many plants of loftier pretensions. The name violet is probably derived from a Latin word signifying way or wayside. The violet, like the primrose, is a native of both hemispheres, and braves alike the blasts of the alpine mountains and the east winds of our early spring. There is one curious circumstance connected with the common violet. The seed-pods not only open like those of most other plants, but throw the seed with great force to a considerable distance. The seed vessel is divided into three pieces, to each of which the seed is fastened. Here it remains until these pieces become dry and hard, when, gradually shrinking, and at length sliding over its surface, they throw it off with a jerk to a distance of two or three feet. As we are told some kinds of violets soon exhaust the soil on which they grow, may not this be a provision of the Creator, to maintain the plant in its perfection by insuring that the little seed shall take root in a fresh soil? Truly great is the care of God for these tiny flowers!—*John Robertson*.

symbol, that which represents something else.	harbinger, forerunner. endurance, patience.
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adversity , misfortune.	emblematical , representative.
reflector , that which throws back.	pretensions , unfounded claims.
moisture , dampness.	hemisphere , half a globe.
clustering , growing together.	alpine , high like the Alps.
	insuring , making sure.

At what time of the year does the snowdrop bloom? Why is the snowdrop loved so much? Of what is it the emblem? What is peculiar about the way in which the bell hangs on the stalk? Describe the snowdrop. In what does the daisy differ from the snowdrop? Of what is the flower of the daisy composed? Which is the pet flower of all the seasons? Of what does the daisy remind us? What other flower reminds us of the same things? What is the primrose emblematical of? How many species grow in this country? Name two of them. What is curious about the violet? What may be the object of this provision? What is the greatest charm of the violet?

SUMMER FLOWERS.

1. In summer it is difficult to select flowers to speak about, they are so abundant. In countless tints and forms of beauty they grow under every hedgerow and adorn every bank. We cannot stroll through cornfields without finding a scarlet pimpernel or poppy; we cannot set down a foot on the sod without crushing a golden buttercup. As we walk along, the blue-eyed speedwell greets us from the roadside, and the red-coated ragged-robin nods to us from the marsh.

2. But amid all this profusion of vegetable life, the wild rose attracts us, as one of the sweetest adornments of our green lanes. In this country it continues in blossom through June and July, and in autumn and through the winter its red hips provide a continual feast for the birds. There are numerous species of wild roses, but many of them are so much alike that they can-

not be easily distinguished. The sweet-briar rose, however, the burnet-leaved rose, and the trailing rose, as well as the dog rose, are well marked.

3. In the East, the land of poetry, the rose is the subject of many legends; the queen of flowers, it is mated with the nightingale, the most melodious of birds. By the Romans it was greatly esteemed. At banquets they wore garlands of it, adorned their dishes with it, and strewed the room with its leaves. In the days of chivalry, knights wore a figure of it embroidered on the sleeve to signify that gentleness should accompany valour; and until very lately, it was customary in France to award a crown formed of its blossoms to the most amiable, modest, and dutiful maiden of the village.

4. Another beautiful ornament of our coppices and waste places at this season is the foxglove. Of all our native flowers this is the most stately. Its stem is of the form of a spike or pyramid, and grows nearly to the height of three feet. It is hung almost from top to bottom with large purple bells, freckled with white; and these, with the drooping leaves, which are placed alternately on the stalk, make it an object so remarkable, that of all wild flowers it is the most frequently selected by the landscape painter to adorn his pictures. It is a poisonous plant, but very valuable in medicine. It abounds most in hilly countries. There we see it blooming in great masses on the ledges of rocks, with moss and tufts of heather, or in the depths of lonely and romantic glens mingled with ferns.

5. And now the broom with its myriad of yellow blossoms is glittering like gold on the heath or dry hill, and over it the trees hover with soothing murmur. It is a shrub four or five feet in height, with green branches, long, straight and pliant. The outer petals of its flower

are shaped like the wings, and its inner ones like the body of a butterfly. This is the case with many plants, as the vetch, the common pea, and the gorse, which



grows in prickly independence by its side. This shaped flower distinguishes a large natural order. It is from the broom that the House of Plantagenet is said to have derived its name, *genêt* being the French word for broom. According to the tradition, Geoffrey, Earl of Anjou, the founder of the family, on the day of battle placed a sprig of it in his helmet. From this circumstance he acquired the name of Plantagenet, which he afterwards assumed and bequeathed to his descendants. In the minds of the young the broom is associated with the common, where "the ragged donkeys feed and the chil-

dren meet to play." When it flowers plenteously it is thought to betoken an abundant harvest.

6. Now, too, there are in bloom the bird's-eye primrose in northern bogs, the gay buck-bean in pools and ditches, and the various species of heaths wrapping the melancholy moor and the lonely mountain in the richest mantle of purple. Heath is a lonely tribe of plants, and from this season till late in autumn, cover those large tracts of waste land which at other periods of the year are bare, bleak, and desolate. They are very hardy, and brave with impunity the fiercest blasts. There are in all five native species. The largest has branched stems about a foot and a half high, and all are thickly covered with hard, little narrow leaves. The flowers are very numerous, and form on each branch a drooping terminal cluster. These flowers make the heathland so glorious that we can hardly imagine they indicate a poor and barren soil. But God works wondrously, and fills the most desolate spots with a loveliness fitted to invite the footsteps and charm and soothe the heart. How beautifully every flower is fitted to its place and to its season! The wild rose tree in the hedge, the gay broom on the common, and the heather on the upland moor, are each fashioned into surpassing loveliness by His hand, and are the objects of his watchful care.—*John Robertson.*

marsh, land sodden with water.
profusion, abundance.
legends, ancient tales.
banquets, sumptuous feasts.
chivalry, heroic adventures.
embroidered, as if worked with
 a needle.
coppices, woody places.

alternately, first one side the
 the other.
romantic, wild, fantastic.
myriad, many thousands.
pliant, easily bent.
tradition, very old story.
impunity, freedom from inju
terminal, growing at the end

Why is it difficult to speak of summer flowers? What do
 often find among the corn? What flower nods to us from

marsh? Which is the most attractive summer flower? Name the months in which it blooms. What does it bear in the autumn and winter? Name some of the species of the wild rose. What ancient nation greatly esteemed the rose? Who wore it embroidered on their sleeves? What wild flower do painters frequently select to adorn their pictures? Name the peculiarity of the blossom of the broom. What other flowers have blossoms of the same shape? What celebrated family derived its name from the broom? What flowers adorn the moors and mountains? What kind of soil does the heath indicate?

THE DAISY.

1. With little here to do or see
Of things that in the great world be,
Sweet daisy! oft I talk to thee
For thou art worthy.
Thou unassuming commonplace
Of nature, with that homely face,
And yet with something of a grace,
Which love makes for thee!
2. Oft on the dappled turf at ease
I sit, and play with similes,
Loose types of things through all degrees,
Thoughts of thy raising;
And many a fond and idle name,
I give to thee, for praise or blame,
As is the humour of the game,
While I am gazing.
3. A nun demure, of lowly port,
Or sprightly maiden, of love's court,
In thy simplicity the sport
Of all temptations;

A queen in crown of rubies drest;
 A starveling in a scanty vest;
 Are all, as seems to suit thee best,
 Thy appellations.

4. A little Cyclops, with one eye,
 Staring to threaten and defy,
 That thought comes next—and instantly
 The freak is over,
 The shape will vanish, and behold
 A silver shield with boss of gold,
 That spreads itself, some fairy bold,
 In flight to cover!

5. I see thee glittering from afar:—
 And then thou art a pretty star;
 Not quite so fair as many are
 In heaven above thee!
 Yet like a star, with glittering crest,
 Self-poised in air, thou seem'st to rest:—
 May peace come never to his nest
 Who shall reprove thee!

6. Sweet flower! for by that name at last
 When all my reveries are past,
 I call thee, and to that cleave fast,
 Sweet silent creature!
 That breath'st with me in sun and air,
 Do then, as thou art wont, repair
 My heart with gladness, and a share
 Of thy meek nature!

—Wordsworth.

unassuming, without pretence.
dappled, marked with spots.
similes, comparisons.
demure, modest.
rubies, valuable gems.
appellations, names.

Cyclops, a fabled race of giants
 with one eye.
crest, like the tuft on the head
 of a bird.
poised, balanced.
reveries, day dreams.

AUTUMN FLOWERS.

1. The calm warm days which begin to prevail, and the appearance of mellowness which the landscape assumes, show us that the summer is past. The air is still and serene, and at night the moon looks unusually large and



beautiful. Already the farmer prepares to garner the corn, and on the hillside which from earliest spring has received the full blessing of the sun, we see the first band of reapers and hear the musical ring of the sickles.

2. Though nature's robes are very rich, we see not now the vast variety which June brought in her train. Yet Autumn has a numerous band of children, and among these not the least attractive are the greater and lesser bindweeds. The latter is here in great abundance among

our feet. See how its roots, as they creep along, grasp tenaciously at the soil, and its winding steps firmly embrace the stalks of corn. Its flowers, which are of a brownish pink with five dark plaits, are now fully unclosed, for the sky is one expanse of blue bathed in light; but let a cloud obscure the sun and they will straightway fold in upon themselves like an umbrella. In yonder hedge is the larger species. It is not exceeded by any of the wild flowers in the beauty of its form and the purity of its trumpet-like blossoms, which, large and white, seem to nod kindly from the leafy festoons on the shrubs and bushes to their humbler sisters beneath.

3. Walking on to the dry hilly pastures we find a flower very unlike the bindweeds, but yet from the structure of its blossoms belonging to the same natural order. It is the harebell, or, as it is sometimes called, the bluebell of Scotland. As we approach we behold it fluttering over the short thick grass of the heath like a cloud of butterflies; for its stem, which is about a foot high, and set at intervals with narrow leaves, possesses a light and airy elasticity which keeps its bells in constant motion. But it grows not only on the heath among fern, broom, and tufts of heather, it is as frequently found dancing and hovering among gray ruins and over mossy graves, clinging like true friendship to places from which pomp and pride have long departed. The harebell is thus the flower of memory, a bright and glancing shape suggesting to the pensive mind many sweet but sad thoughts of long-vanished pleasure.

4. Often growing side by side with the harebell, you may notice the hawkweed, a showy plant resembling the dandelion in appearance and manner of growth, but *lighter and more graceful*. Like the dandelion, its *leaves are cut and jagged*, but still handsome. Its

flowers are very gay and pretty. They vary in colour from a bright orange to a pale lemon. According to an old fable the hawk feeds upon this plant, and is said to derive from it, its clearness of vision. The hawkweed belongs to one of the most extensive families of plants. It is a compound flower with strap-shaped flowerets, and its seeds when ripe are furnished with a feathery plume, by means of which they are wafted to spots suitable to their growth.

5. Speaking of yellow flowers, you must know that this is the prevailing colour of those that bloom during the autumn months. You may observe in the neighbouring thicket, the crowded clustered heads of the tall golden rod; on the crumbling walls of the old castle, the glittering snap-dragon; on the gravelly heath, in the hedge, or the ditch, the different species of St. John's wort; and on the sand of the beach, showering down its petals on the dry salt sea-weed, the horned poppy. All these are yellow flowers, and give to the autumn landscape such a brilliant appearance that few would suppose the number and variety of species so much diminished.

6. And now, plainly, the trees have lost the deep glossy green of summer. They have acquired a richer and more solemn hue, and as we gaze over hill and valley, we behold the glory of the landscape sensibly increased. But, alas, this is the beauty of decay, the herald of approaching death! Yet those who regard these aspects of nature with a healthy spirit, see in autumn not a season of despondency, but of promise and of hope. For is it not plain that this death of the vegetable world is designed to exalt its life? Not a leaf falls without a purpose. Future springs shall be greener, future summers more leafy, and future autumns more fruitful for their fall.—*John Robertson.*

mellowness, softness.
landscape, the aspect of a country.
tenaciously, holding fast.
festoons, garlands.
elasticity, suppleness.

pensive, sadly thoughtful.
flowerets, little flowers.
diminished, lessened.
herald, forerunner.
despondency, sadness.

What signs show that summer is past? Where do the reapers begin their work? What two flowers are very attractive at this season? How does a cloud coming before the sun influence the flowers of the bindweed? Where is the harebell found? What does this flower suggest to a pensive mind? Name the flower resembling the dandelion. What does the old fable say about the hawk? What is the prevailing colour of autumn flowers? What does the beauty of decay foretell? Why may we see promise and hope in the decay of autumn?

WINTER FLOWERS.

1. Winter has set in, and every tree is bare; the fields are waste stubble, and the mountain tops are white with snow. But though the country bears every mark of desolation, we are not to suppose that this change gives less evidence of wisdom and goodness, than either the freshness of spring, the leafiness of summer, or the fruitfulness of autumn. The severity of winter is quite as great a blessing as the mildness, warmth, or geniality of the other seasons, and ought to be as gratefully received.

2. Notwithstanding the general barrenness of the country, it is not altogether destitute of flowers. We notice a few stragglers from the files of autumn, as the ragwort, and are still cheered by the modest daisy peeping timidly from the grass. The green gorse, too, stands in frosty fortitude on the bleak common, throwing with its golden flowers a passing gleam of brightness over the scene. But gayest among the loiterers is the wild marigold, which, blooming as early as July, is often found in perfection in December.

3. These plants, however, are not properly associated with this season; but look to that wall and you will find one that is. This is midsummer to that dark-leaved, clambering plant. Amid the chill fogs of November it shoots forth its green flowers, and all through the winter



remains vigorous and healthy. It is the ivy. From its hardihood and undying strength, and from the closeness with which it clings to places where it has once fixed itself, this plant has ever been regarded as the symbol of friendship.

4. But see the holly, with its smooth gray bark, red berries, and glossy, prickly leaves. Is it not the most cheerful feature of the wintry woods? Is nature in a condition of torpor there? No, its whole aspect proclaims

to man, that though the earth with its vegetation is bound in frost, yet a vigorous life is silently beating in its bosom. The trees and the plants may appear stripped of external signs of vitality, but not only is their life sustained, but their vigour is being accumulated against the time when they shall again put on their green robes. Of the holly, which looks so beautiful from its contrast with the dry skeleton boughs, the Romans were great admirers. During a pagan festival which occurred in the depth of winter, they were accustomed to send branches of it to their friends, with their good wishes; and this, no doubt, was the origin of the custom of decorating churches and houses with it during Christmas.

5. Another plant associated, like the holly, with Christmas is the mistletoe, and doubtless you are all well acquainted with its forked branches, and its thick, leathery leaves. You may not know, however, that the mistletoe is peculiar in one respect; it refuses to grow except on living trees. It is found attached sometimes to the oak, lime, or maple, but more frequently to the apple-tree. Its root, shaped like the trunk of a fly, pierces the bark and appropriates to its own use such juices as are fitted to nourish it. The ancient Druids attributed great virtues to the plant. Believing it to be the peculiar gift of heaven, they sought it with eagerness; and when it was found, the chief priests ascended the tree, dressed in white, and cut it down with a golden knife.

6. It is to be hoped that something has been done in this and the three preceding lessons on wild flowers to excite you to observation. The scholar should not stop here; he should go on acquiring fresh knowledge, and the simple act he will find to be its own exceeding great reward; for the love of nature is, next to religion and our social feelings, the most purifying of emotions.—*John Robertson.*

stubble , stalks which are left after the corn is cut.	vitality , life.
barrenness , nothing growing.	skeleton , framework.
fortitude , bravery.	pagan , not Christian.
clambering , climbing.	Druids , a religious order of men in ancient Britain.
torpor , inactivity, dulness.	emotions , feelings.

In what condition are the fields in winter? Name two flowers that remain over from autumn. What plant stands bravely on the bleak common? Which is the prettiest plant of all at this season? What two plants are most characteristic of winter? Who were great admirers of the holly? What were they accustomed to do with it during their winter festival? Of what custom is this the origin? Which winter plant grows only on other plants? Name some trees it grows upon. Who valued it very much in old times?

FLOWERS, THE STARS OF EARTH.

1. Spake full well, in language quaint and olden,
One who dwelleth by the castled Rhine,
When he called the flowers, so blue and golden,
Stars, that in earth's firmament do shine.
2. Stars they are, wherein we read our history,
As astrologers and seers of eld;
Yet not wrapped about with awful mystery,
Like the burning stars which *they* beheld.
3. Wondrous truths, and manifold as wondrous,
God hath written in those stars above,
But not less in the bright flowerets under us
Stands the revelation of His love.
4. Bright and glorious is that revelation,
Writ all over this great world of ours—
Making evident our own creation,
In these stars of earth, these golden flowers.

5. Everywhere about us are they glowing—
Some like stars to tell us spring is born;
Others, their blue eyes with tears o'erflowing,
Stand, like Ruth, amid the golden corn.



6. Not alone in spring's armorial bearing,
And in summer's green-emblazoned field,
But in arms of brave old autumn's wearing,
In the centre of his brazen shield.
7. Not alone in meadows and green alleys,
On the mountain top, and by the brink

Of sequestered pools in woodland valleys,
Where the slaves of nature stoop to drink.

8. Not alone in her vast dome of glory,
Not on graves of bird and beast alone,
But in old cathedrals, high and hoary,
On the tombs of heroes carved in stone.
9. In the cottage of the rudest peasant;
In ancestral homes, whose crumbling towers,
Speaking of the past unto the present,
Tell us of the ancient games of flowers.
10. In all places, then, and in all seasons,
Flowers expand their light and soul-like wings,
Teaching us, by most persuasive reasons,
How akin they are to human things.
11. And with child-like credulous affection,
We behold their tender buds expand—
Emblems of our own great resurrection,
Emblems of the bright and better land.

—*Longfellow.*

quaint, odd.

astrologer, one who pretends to
foretell events by the stars.

seers, prophets.

old, olden times.

manifold, various and many in
number.

revelation, the act of making
known.

armorial, belonging to or having
the appearance of armour.

emblazoned, adorned with ar-
morial figures.

sequestered, secluded.

akin, like, or related.

credulous, easily believing.

emblems, pictures or representa-
tions.



HENRY MAUDSLAY.

1. Every one has heard and read of the heroes of the battlefield, but peace has its heroes as well as war. A short account is here given of one such hero, who, by his inventive skill, and by his improvements of the tools used in the construction of different machines, has largely developed our manufacturing resources, and, by his uprightness and integrity as a man, has left behind him an honoured name and a noble example.

2. Henry Maudslay was born at Woolwich in 1771. His father having served for some time as a soldier, was sent home to Woolwich as an invalid, and was soon after discharged. He then obtained employment in the arsenal at that place. While acting as a soldier he was several times engaged in battle, and in his last action he was hit by a musket-ball in the throat. The soldier's stock which he wore had a piece cut out of it by the ball. The direction of the ball was thus diverted, and though he was severely wounded, his life was saved. He brought home the stock, and preserved it as a relic, afterwards leaving it to his son. Long after, the son would point to the stock, hung up against his wall, and say, "But for that bit of leather there would have been no Henry Maudslay."

3. At twelve years of age, Henry obtained work in the arsenal, where he soon became an expert metal-worker. In after days, when his renown had spread far and wide, and he was himself a large employer of skilled labour, he would often look back with pride to the forging of his early days at Woolwich arsenal. He began life on the grand principle, that what is worth doing at all is worth doing well, and he adhered to that principle to the end.

4. In 1798, Mr. Bramah, the celebrated lock-maker,

had taken out a second patent for an improved lock. Owing to the clumsy tools and inferior workmanship of those days, he found it almost impossible to secure that accuracy without which the lock would be almost useless. The name of the young and clever workman at Woolwich arsenal was mentioned to him, and it was determined that Maudslay should be sent for.

5. The interview is thus described:—"Maudslay was at once sent for to Bramah's workshop, and appeared before the lock-maker, a tall, strong, comely young fellow, then only eighteen years old. Bramah was almost ashamed to lay his case before such a mere youth; but necessity compelled him to try all methods of accomplishing his object, and Maudslay's suggestions in reply to his statement of the case were so modest, so sensible, and as the result proved, so practical, that the master was constrained to admit that the lad before him had an old head, though set on young shoulders. Bramah decided to adopt the youth's suggestions, made him a present on the spot, and offered to give him a job if he was willing to come and work in a town shop. Maudslay gladly accepted the offer, and in due time appeared before Bramah to enter upon his duties.

6. "As Maudslay had served no regular apprenticeship, and was of a very youthful appearance, the foreman of the shop had considerable doubts as to his ability to take rank alongside his experienced hands. But Maudslay soon set his master's and the foreman's mind at rest. Pointing to a worn-out vice-bench, he said to Bramah,— 'Perhaps if I can make that as good as new by six o'clock to-night, it will satisfy your foreman that I am entitled to rank as a tradesman and take my place among your men, even though I have not served a seven years' apprenticeship.' There was so much self-reliant ability in the prop-

posal, which was moreover so reasonable, that it was at once acceded to. Off went Maudslay's coat, up went his shirt sleeves, and to work he set with a will upon the old bench. The vice-jaws were re-steeld 'in no time,' filed up, re-cut, all the parts cleaned and made trim, and set into form again. By six o'clock the old vice was screwed up to its place, its jaws were hardened and properly tempered, and the old bench was made to look so smart and neat that it threw all the neighbouring benches into the shade. Bramah and his foreman came round to see it, while the men of the shop looked admiringly on. It was examined and pronounced 'a first-rate job.' This piece of work secured Maudslay's footing, and next Monday morning he came on as one of the regular hands."

7. No wonder that such a man soon took a very prominent place in the shop. The most difficult and delicate pieces of work were entrusted to Maudslay. He felt an honest pride in his work. His father had died soon after he entered Bramah's works. Every Saturday night he was in the habit of walking down to Woolwich and handing over to his mother a considerable share of his weekly wages, and this he continued to do as long as she lived. Thus while gaining skill and experience as a workman, he never forgot his duties as a son.

8. Notwithstanding his youth he became not only the favourite but the hero of the shop, and by unanimous consent was appointed head foreman of the works. He proved himself especially useful to his master by devising new and greatly improved tools for making his patent locks.

9. In 1797 he commenced business for himself in a small workshop in Wells Street, London. The shop was in an awful state of dirt and dilapidation when he became its tenant. He entered the place on a Friday, but

by the Saturday evening, with the help of his excellent wife, he had the shop thoroughly cleansed, whitewashed, and put in readiness for beginning work on the next Monday morning.

10. He still directed his attention particularly to the improvement of the tools which were used, especially with the turning-lathe. He saw very clearly that so long as the excellence of the work chiefly depended upon the skill and care of the individual workman, work of a very unequal and unreliable character must be turned out. His great desire, therefore, was to make the machinery as far "self-acting" as possible. Among other valuable improvements there is one of especial value called the "slide-rest," first invented by him, and now in universal use.

11. While Maudslay was thus plodding on, Mr. Brunel—who afterwards became so famous as the constructor of the Thames Tunnel, and is better known as Sir Isambard Brunel—was bringing before the notice of the Admiralty some inventions of his own for the better construction of ships of war. Not being himself a practical mechanic, Mr. Brunel had great difficulty in carrying out his ideas. He found in Maudslay the very help he so much needed. His plans being approved of by the Admiralty, the whole of the requisite machinery was executed by Maudslay, who was very fully occupied with this work for nearly six years.

With an extending business, Maudslay had removed first to Margaret Street and then to much larger premises in Westminster Road, Lambeth, in 1810.

12. He next turned his attention to the engines used in steamboats. The *Regent*, which was the first steamboat that plied between London and Margate, was fitted with engines by Maudslay in 1816.

13. Like every good workman who takes pride in his craft, he kept his tools in first-rate order, clean, and tidily arranged, so that he could lay his hand upon the thing he wanted at once, without loss of time. He always made it a rule, from which he would never deviate, that he would turn out nothing but really good work. Every little detail was carefully attended to, and his workshop was considered one of the best training schools in the kingdom for young mechanics. Many of the most distinguished engineers of the present day are proud to acknowledge the benefit they have derived from the lessons that were taught and the example set in Henry Maudslay's works.

14. In the height of his prosperity, Maudslay never forgot his humble birth-place. He was ever glad to visit the scenes of his childhood, and to talk about his early days. After his death in 1831, he was buried by his own desire in the parish churchyard of Woolwich. It was natural that, being proud of his early connection with Woolwich, he should wish to lie there; and Woolwich, on its part, has equal reason to be proud of Henry Maudslay.—*Smiles's Industrial Biography.*

arsenal, a manufactory of heavy artillery.

stock, a soldier's neck dress.

adhered, remained faithful to.

patent, a means of protecting a man's own invention by a payment to government.

vice, a kind of iron press for holding things firmly.

tempered, moderated.

unanimous, with one mind.

dilapidation, falling to pieces.

slide-rest, an appendage to the turning-lathe for facilitating and insuring accuracy in the motion of the cutting tool.

Admiralty, the place where the business of the royal navy is managed.

craft, handiwork.

Where was Henry Maudslay born? How old was he when he went to work? Describe his first interview with Bramah. Show Maudslay's care for his mother. In what state did Maudslay find his first shop? What did he do with it? What special improve-

ment in turning-lathes did he invent? How did Maudslay prove himself of service to Mr. Brunel? What great work was executed by Mr. Brunel? Where was Maudslay buried?



PRINTER'S SONG.

1. Pick and click
Goes the type in the stick,
As the printer stands at his case;
His eyes glance quick, as his fingers pick
The type at a rapid pace;
And one by one as the letters go,
Words are piled up steady and slow—

(7)

F

Steady and slow,
 But still they grow,
 And words of fire they soon will glow;
 Wonderful words, that without a sound
 Traverse the earth to its utmost bound:
 Words that shall make
 The tyrant quake,
 And the fetters of the oppress'd shall break;
 Words that can crumble an army's might,
 Or treble its strength in a righteous fight;
 Yet the type they look but leaden and dumb,
 As he puts them in place with finger and thumb.
 But the printer smiles,
 As his work beguiles
 By chanting a song as the letters he piles,
 With pick and click,
 Like the world's chronometer, tick! tick! tick!

2. O, where is the man with such simple tools
 Can govern the world as I?
 With a printing press, an iron stick,
 And a little leaden die,
 With paper of white, and ink of black,
 I support the Right, and the Wrong attack.
3. Say, where is he, or who may he be,
 That can rival the printer's power?
 To no monarchs that live the wall doth he give,—
 Their sway lasts only an hour;
 While the printer still grows, and God only knows
 When his might shall cease to tower!

—*J. C. Prince.*

case, tray with subdivisions containing the various types.
stick, iron instrument into which

the types are set up. It is held in the left hand, and was originally made of wood.

THE FALL OF AN AVALANCHE.

1. The Wiggis, in the canton of Glarus, is one of those Swiss mountains which, when seen from a certain point of view, have a most imposing appearance, but at the same time they convey the impression that they are likely to be the scene of dangerous falls of snow. Viewed from the village of Netstall, about five minutes' walk from its base, it rises perpendicularly like a wall to the height of nearly 7000 feet above the bottom of the valley, and in winter it has repeatedly heaved from its giant back enormous masses of snow, which have threatened the village with destruction.

2. In the year 1839 and 1844 the village suffered severely from avalanches, but the damage done on these occasions was inconsiderable when compared with the frightful event which roused the inhabitants of Netstall from their slumbers on the morning of March 3rd, 1865.

3. At about four o'clock in the morning a dull, booming sound was heard from the Wiggis, and a mass of freshly fallen snow, covering about 8,000,000 square feet, detached itself from the steep mountain wall, and slid downwards with ever-increasing velocity towards the plain, partly rising into the air as it fell, and producing a concussion of the atmosphere difficult to conceive.

4. The avalanche of snow rushed with such violence through and over the village, and produced such a crackling, roaring, and thundering, that not a few persons thought it must be an earthquake. In a few moments the village seemed as if laid in ruins.

5. The avalanche overwhelmed it along its whole length, which amounts to 1500 or 2000 paces. Beech and maple trees, of two to three feet in diameter, were torn up by the roots, or *broken across like so many reeds*. More than a

thousand forest trees were thus uprooted and carried long distances, many of them into the village. The orchards



also suffered very severely, as many as 300 fruit trees having been destroyed.

e. This catastrophe left the village a melancholy scene of ruin and destruction, the principal street in particular

being almost choked up with branches of trees, window-shutters, fragments of roofs, masses of hay, and even large stones, all intermingled in the wildest confusion.

7. Fortunately not a single life was lost, though two men who happened to be in the street when the fall took place were caught in the snow, and narrowly escaped suffocation.

canton, a province of Switzerland.

imposing, grand, impressing.

impression, idea.

repeatedly, often.

enormous, very large.

avalanche, an immense mass of

moving snow which becomes

detached and glides down the

side of a mountain.

detached, separated.

velocity, speed.

concussion, shaking or agitation.

diameter, thickness.

catastrophe, calamity.

melancholy, sad.

fragments, pieces.

intermingled, mixed together.

Where is Mount Wiggis situated? What height does it rise above the valley? What is an avalanche? When did the event referred to take place? What area did the snow cover that formed the avalanche? Describe some of the damage. How many forest trees did it destroy? What happened to two persons who were in the street at the time of the fall?



THOSE WE LOVE

1. We leave our own—our fatherland,
 To lead the wanderer's chequered life—
 On stormy seas or desert sand.
 In pilgrim peace or busy strife.
But there's a hope to save and cheer
 Through all of danger, toil, and pain;
It shines to dry the starting tear,
 And lights the pathway back again
 To those we love.
2. Let others give us gems and gold,
 With gems and gold we'd lightly part;
We take them, but we do not hold
 The treasures sacred in the heart.
Such costly boons may have the power
 To win our thanks and wake our pride;
But dearer is the withered flower
 That has been worn and thrown aside
 By those we love.
3. We pine beneath the regal dome,
 We prize not all that's rich and fair;
We cannot rest in princely home,
 If those we cherish dwell not there.
But let the spirit choose its lot,
 We'd rather take the rover's tent;
Or gladly share the peasant's cot,
 And bless the flying moments spent
 With those we love.
4. And when at last the hand of death
 Has dimmed the glance and chilled the breast
When trembling word and fleeting breath
 Dwell on the name we like the best.

E'en then, however keen the throe,
 'Tis easy for ourselves to die;
 The deepest anguish is to know
 That grief will wring the mourner's sigh
 From those we love.

—*Eliza Cook.*

fatherland, native country.
chequered, varied.
gems, precious stones.
regal, royal.
dome, an arched roof.
cherish, to love.

rover, wanderer.
peasant, countryman.
glance, sight.
chilled, cooled.
throe, agony.
anguish, pain.

GEORGE PEABODY.

1. George Peabody, the distinguished philanthropist, merchant, and banker, a "self-made man" in every sense of the word, was born at Danvers, Massachusetts, February 18, 1795. His father was of French descent, and in humble circumstances. When George was eleven years of age, he was apprenticed to a grocer in his native town, where he remained for four years. At the expiration of this time he desired to become acquainted with business on a larger scale. With this object in view, after a year spent with his grandfather in Vermont, he joined his brother David in 1811, in a "dry goods" shop which the latter had opened at Newburyport. A fire, however, destroyed the greater part of the town, including the warehouse of the Peabodys. But George was not made of such stuff as to give way to despair, or even to despondency. He remembered that he had an uncle, John Peabody, who was settled in the district of Columbia; and just as the youth was thinking of going in search of him, he received an invitation from his uncle to come and join him. The boy went, and soon became the leading spirit and the

mainstay of the business intrusted to his hands. This was in May, 1812. War with England was close at hand. Two months later a British fleet sailed up the Potomac, and menaced Washington and the neighbouring ports. In this emergency, the young clerk, though not yet of age, joined a volunteer company of artillery, and did active duty for some months at Fort Warburton; and, to use the words of an American writer, "if he gained here no military honours, at least he showed that he had within him the soul of a patriot, and the nerve of a soldier."

2. Having spent two years in the service of his uncle, we next find him attracting the attention of a Mr. Elisha Riggs, who invited young Peabody to join him in business; Mr. Riggs finding the necessary capital, and his young partner transacting and managing the business. To all concerned, the partnership of Riggs and Peabody proved a most satisfactory and successful arrangement.

3. In 1815, the establishment was removed to Baltimore; seven years later its extended operations were such as to justify the opening of branches at Philadelphia and New York; and about the year 1830, by the retirement of his partner, George Peabody found himself at the head, and the virtual director, of one of the largest mercantile firms in the United States. Having spent several years in managing the house in Baltimore, where, in addition to his ordinary business, he undertook several important financial negotiations for the state of Maryland, of which Baltimore is the capital; Mr. Peabody next resolved to take up his abode in England. In 1837, he came to London; and retiring a few years later from the American firm, established himself in the city as a merchant, banker, and money broker.

4. He did not become a banker in the ordinary English

sense of the term; but to use the words of a writer in the *Times*, he was "like the Rothschilds and the Barings, he loaned money, changed drafts, bought stocks, and held deposits for customers; but he did not, like English bankers, pay out money." The magnitude of his transactions in this capacity perhaps fell short of one or two other great houses of the same class; but in honour, faith, punctuality, and public confidence, the firm of George Peabody & Co., of Warrford Court, City, stood second to none.

5. Shortly after Mr. Peabody came to London in 1837, the affairs of his native land, financially speaking, could hardly have been more critical. American credit was shaken, and banks suspended payment one after another in quick succession. "The default of some of the states," said his friend Everett, "the temporary inability of others to meet their obligations, and the failure of our moneyed institutions, threw doubt and distrust on all American securities. That great sympathetic nerve of the commercial world, credit, as far as the United States were concerned, was, for a time, paralysed. At that moment—and it was a critical one—Mr. Peabody not only stood firm himself, but he was the cause of firmness in others. There were not at that time, probably, half a dozen other men in Europe who, upon the subject of American securities, would have been listened to for a moment in the parlour of the Bank of England. But his judgment commanded respect; his integrity won back the reliance which men had been accustomed to place upon American securities. The word of an honest man performed the miracle of turning paper into gold."

6. Mr. Peabody, at this trying period, rose far above the mere financier—he placed himself in the first rank of public benefactors. Towards Maryland, his

adopted State in America, his services were of a special character. Under an act of the Maryland Assembly, he had been made in 1835, one of three commissioners to negotiate a loan for the State. The loan was obtained, and the credit of the State, after suffering for a time, was restored. For his services in this matter Mr. Peabody declined all compensation, but in 1848 he was rewarded by a special vote of thanks on the part of the Legislative Assembly.

7. In 1851, when the American productions intended for the Great Exhibition had arrived, it was found that the portion of the building set apart for their display was a barn-like space, in which neither platform nor counter, show-case nor decoration, had been prepared. The United States government had appropriated no funds for the purpose, and everything seemed to presage an utter failure. In this dilemma Mr. Peabody came to the rescue. Not a person connected with the Exhibition had ever seen him. As agent or exhibitor, consigner or juror, no claim could be made upon his help. But without pretence or show, upon the ground of a simple business transaction as he considered it, with no valid security, and simply that his native land might not be disgraced, he promptly supplied the sum of \$15,000.

8. In June 1852, the town of Danvers celebrated the centenary anniversary of its foundation. A public dinner was given, but Mr. Peabody, being in England, could not attend. He sent a letter of apology, however, inclosing a cheque for \$20,000 for educational purposes in his native town. This handsome donation he subsequently followed up with others on a larger scale; and the "Peabody Institute" now stands as a lasting memorial of no less than \$500,000, bestowed by Mr. Peabody as a *free gift* during his own lifetime.

9. In 1852 his money was readily given, in conjunction with that of Mr. Grinnell, to fit out the brig *Advance* under Captain Elisha Kent Kane, to go in search of the English explorer, Sir John Franklin. At his own expense he founded and endowed the Literary and Scientific Institution of Baltimore. To the American Southern Educational Fund he contributed no less a sum than \$2,000,000.

10. But the deed by which the name of Peabody will be longest remembered in this, his adopted country, is his noble gift of a quarter of a million sterling for the purpose of erecting suitable houses to be let at low rents to the poorer classes of London.

11. This act of "princely munificence," as it was styled by Queen Victoria in an autograph letter which she addressed to Mr. Peabody, was one on which the *Times* commented as "wholly without parallel." In conveying her thanks to the generous giver, her Majesty said that it was an act "which will ever carry its best reward in the consciousness of having contributed so largely to the assistance of those who can so little help themselves as the London poor." All sorts of honours were offered to Mr. Peabody in recognition of his generosity; among others, "that of either a baronetcy, or the Grand Cross of the Order of the Bath," by the Queen herself; but he declined to accept any, wisely contenting himself with the thought that he would be best remembered on both sides of the Atlantic as plain George Peabody. This letter was accompanied by the offer of a beautiful miniature of Her Majesty, which she desired to have painted for him. In replying to it, Mr. Peabody said, "the portrait which your Majesty is graciously pleased to bestow on me I shall value as the most precious heirloom that I can leave in the land of my birth; where, together with the *letter which your Majesty has addressed to me,*

it will ever be regarded as an evidence of the kindly feeling of the Queen of the United Kingdom towards a citizen of the United States." In 1868 he supplemented his generous gift by a further donation of £100,000 for the same benevolent purpose. But even this unexampled generosity did not satisfy the liberal ideas of George Peabody; for after his death it was found that he had directed his executors to pay over to the trustees of the Peabody Donation Fund a further sum of £150,000, thus making a grand total of half a million sterling as the gift of this noble and single-minded man for the amelioration of the condition of the London poor.

12. One honour, and one honour only, England conferred upon this great benefactor—that of a statue, placed near the Royal Exchange, London, which was publicly inaugurated, July, 1869, by the Prince of Wales, in the presence of the lord mayor, aldermen, and citizens of London, the governors of the Bank of England, the American minister, and a host of distinguished personages. The freedom of the city of London was conferred on Mr. Peabody about the same time.

13. This distinguished philanthropist breathed his last on the evening of November 4, 1869, honoured and esteemed by multitudes besides those who enjoyed the privilege of his personal acquaintance. On the 12th of the same month, the remains of Mr. Peabody were temporarily interred in Westminster Abbey, previous to their being removed to America, where, during his lifetime, he had caused or ordered a handsome mausoleum to be constructed in his native state, looking forward to the day when his bones should rest among his own people. His remains were afterwards conveyed to America on board H.M. turret-ship *Monarch*, and were finally interred at *Danvers*—since called Peabody—February 8, 1870.

14. In addition to the immense wealth distributed by this benevolent millionaire during his lifetime, he left upwards of five million dollars for the benefit of his relatives.

15. Mr. Gladstone, a few days after the death of Mr. Peabody, made touching allusion to the event, and thus indicated the great lesson of his life: "He was a man who taught us in this commercial age, which has witnessed the construction of so many colossal fortunes, at once the noblest and most needful of all lessons; he has shown us how a man can be master of his wealth instead of being its slave."

philanthropist, one who shows his love for his fellow-men by active benevolence.

virtual, real.

financial, connected with money affairs.

draft, a form of demand for money.

deposit, money or valuables paid into a bank.

presage, foretell.

consigner, one who had sent goods.

juror, one who has to decide which is the best.

\$ (dollar), an American coin worth about 4s. 2d.

centenary, the 100th anniversary.

autograph, written by one's self.

miniature, small portrait.

heirloom, personal property handed down to descendants.

supplemented, increased.

amelioration, bettering.

mausoleum, a large tomb.

millionaire, a very wealthy man.

colossal, huge, extremely large.

Massachusetts, } states forming

Columbia, } part of the U.

Maryland, } S. of America.

Potomac, a river of N. America which flows past Washington, the capital.

Vermont, } important cities

Baltimore, } in the United

Philadelphia, } States.

New York, }

Where was George Peabody born? Where was he first apprenticed? What steps did Peabody take when war with England was threatened? With whom did he enter into partnership? In what capacity did Peabody come to England? What important service did he render to America shortly after coming to this country? How did he act in connection with the Great Exhibition of 1851? In what method did Peabody remember the centenary of

his native place? By what deed will he be chiefly remembered? What acknowledgment did he receive? What was the total amount he gave to the city of London? Describe the circumstances of his burial.



THE CLIFFS OF DOVER.

1. Rocks of my country! let the cloud
Your crested heights array;
And rise ye like a fortress proud
Above the surge and spray!
2. My spirit greets you as ye stand,
Breasting the billow's foam;
Oh, thus for ever guard the land,
The severed land of home!

3. I have left sunny skies behind,
Lighting up classic shrines,
And music in the southern wind,
And sunshine on the vines.
4. The breathings of the myrtle flowers
Have floated o'er my way;
The pilgrim's voice at vesper hours
Hath soothed me with his lay.
5. The isles of Greece, the hills of Spain,
The purple heavens of Rome—
Yes, all are glorious; yet again
I bless thee, land of home!
6. For thine the Sabbath peace, my land;
And thine the guarded hearth;
And thine the dead, the noble band,
That make thee holy earth.
7. Their voices meet me in thy breeze;
Their steps are on thy plains;
Their names, by old majestic trees
Are whispered round thy fanes.
8. Their blood hath mingled with the tide
Of thine exulting sea;—
Oh! be it still a joy, a pride,
To live and die for thee! —*Mrs. Hemans.*

surge and spray, the swell and
froth of the ocean wave.
severed, separated.
vesper, evening.

classic, renowned in ancient
writings.
majestic, noble.
fanes, churches.





THE LOST COLONY.

1. Although now consisting of little else than barren rocks, mountains covered with snow and ice, and valleys covered with glaciers,—although its coasts are now lined with floods of ice, and chequered with icebergs of immense size, Greenland was once easily accessible; its soil was fruitful, and well repaid the cultivation of the earth. It was discovered by the Scandinavians towards the close of the tenth century, and a settlement was effected on the eastern coast, in the year 982, by a company of adventurers from Iceland, under command of Eric the Red. Emigrants flocked thither from Iceland and Norway, and the results of European enterprise and civilization appeared on different parts of the coast. A colony was established in Greenland, and it bid fair to go on and prosper.

2. Voyages of exploration were projected in Greenland, and carried into effect by the hardy mariners of those days. Papers have been published by the Danish Anti-

quarian Society at Copenhagen, which go far to show that those bold navigators discovered the coast of Labrador, and proceeding to the south, fell in with the island of Newfoundland; continuing their course, they beheld the sandy shores of Cape Cod, centuries before the American continent was discovered by Christopher Columbus.

3. It is even believed that these Scandinavian adventurers effected a settlement on the shores of what is now known as Narraganset Bay in Rhode Island, and in consequence of the multitude of grapes which abounded in the woods, they called the new and fruitful country Vinland. But owing to the great number of hostile savages who inhabited these regions, the colonists, after some sanguinary skirmishes, forsook the coast and returned to Greenland.

4. The colony, however, continued to flourish, and the intercourse between it and the mother country was constant and regular. In the year 1400, it is said to have numbered one hundred and ninety villages, a bishopric, twelve parishes, and two monasteries. During this period of four hundred years, vessels were passing, at regular intervals, between the Danish provinces in Europe and Greenland. But in the year 1406, this intercourse was interrupted in a fatal manner. A mighty wall arose, as by magic, along the coast, and the navigators who sought those shores could behold the mountains in the distance, but could not effect a landing.

5. During the greater part of the fifteenth, and the whole of the sixteenth and seventeenth centuries, Greenland was inaccessible to European navigators. The whole coast was blockaded by large masses and islands of ice, which had been drifting from the north for years, and which at length chilled the waters of the coast, changed the

temperature of the atmosphere, and presented an impassable barrier to the entrance in their ports of friend or foe. The sea, at the distance of miles from the land, was frozen to a great depth. Vegetation was destroyed, and the very rocks were rent with the cold. And this intensely rigid weather continued for ages!

6. The colony of Greenland, after this unexpected event took place, never had any intercourse with the friends in the mother country. They were cut off from all the rest of the world. And by this sudden and unanticipated change of climate, they were also doubly deprived of all resources within themselves. Their fate, however, is a mystery. History is silent on the subject. All that is known of this unfortunate people is, that they no longer exist.

7. The ruins of their habitations and their churches have since been discovered along the coast by adventurous men, who have taken advantage of an amelioration in the climate to explore that sterile country, and establish settlements again on various parts of the coast: and also by missionaries, who have braved hardships and perils to introduce among the aboriginal inhabitants the blessing of civilization and Christianity. No other traces of those early European settlers have been discovered, and we can only speculate upon their fate.

8. It would require no vivid fancy to imagine the appalling sense of destitution which blanched the features and chilled the hearts of those unhappy colonists when they began to realize their forlorn condition; when the cold rapidly increased, and their harbours became permanently blocked with enormous icebergs, and the genial rays of the sun were obscured by fogs; when the winters became for the first time intensely rigid, cheerless, and dreary; when the summers were also cold, and the soil

unproductive; when the mountains, no longer crowned with forests, were covered with snow and ice throughout the year, and the valleys filled with glaciers; when the



wonted inhabitants of the woods and waters were destroyed or exiled by the severity of the weather, and their places perhaps supplied by monsters of a huge and rightful character.

2. It were easy to follow this people in fancy to their wellings; to see them sad, spiritless, and despairing, while conscious of their imprisoned and cheerless condition and impending fate; to watch them as their numbers dually diminish through the combined influence of it and continual suffering; to behold them struggling existence, and striving, nobly striving, to adapt their

constitutions, their habits, their feelings, and their wants to their strangely changed circumstances, but all in vain.

—*J. S. Sleeper.*

glaciers, fields or immense masses of ice formed in deep but elevated valleys.

chequered, diversified.

accessible, that may be approached.

settlement, the act of planting a colony.

emigrants, people who quit one country to live in another.

colony, a body of people transplanted from their mother country to inhabit some distant place.

exploration, discovery.

projected, formed.

antiquarian, pertaining to antiquity or ancient times.

navigators, persons skilful in the art of navigation or directing the course of ships.

hostile, warlike.

monasteries, houses of religious retirement.

intervals, periods.

barrier, obstacle.

rigid, cold.

intercourse, communication.

unanticipated, unlooked for.

habitations, dwellings.

amelioration, improvement.

sterile, barren.

aboriginal, first, primitive.

speculate, surmise.

vivid, strong or lively.

appalling, growing pale with fear.

blanched, whitened.

forlorn, deserted.

permanently, without change.

genial, enlivening.

obscured, darkened.

wonted, usual.

exiled, banished or driven out.

despairing, giving up all hope.

impending, threatening.

Scandinavians, inhabitants of Norway and Sweden.

Greenland, an extensive territory, North America.

Iceland, an island, North Atlantic Ocean.

Labrador, an extensive peninsula, east coast of British North America.

Newfoundland, a large island, British America, at the mouth of the Gulf of St. Lawrence.

Cape Cod, a peninsula, United States of America.

Rhode Island, United States, North America.

When was Greenland first discovered, and by whom? What other coasts are supposed to have been discovered in those days? Why did the colonists forsake these regions? Describe the colony in the year 1400. How was the intercourse with the mother countries interrupted in the year 1406? How long was Greenland rendered inaccessible to European navigators? What traces of these early settlers have been discovered?

THE DUKE D'ENGHIEN.

1. Last of a high and noble race,
Unhappy prince, thy fate we mourn
Thou from affection's fond embrace
And life and fame wert torn.
It was not the cold battlefield,
Where thou bright wreaths of glory won—
That saw thy lips in silence seal'd,
Great Condé's gallant son.



2. The midnight torch gleam'd wild around,
Where thou didst fall so young and brave;
Thy breast received the fatal wound,
And ready was thy grave.
No gentle heart was there to sigh,
No eye where pity's teardrop shone:
Stern were the forms that saw thee die,
Great Condé's gallant son.

3. There was a heart did mourn thy fate,
Thy youthful bride, Oh, where is she?
Amid thy halls so desolate
Did she not grieve for thee?
And where is he who seal'd thy doom,
Who made that widowed bosom lone?
He sleeps, like thee, within the tomb,
Great Condé's gallant son!
4. And while the world records his fame,
This deed of blood shall dim the scene;
Shall twine with his immortal name,
And hide his laurels green.
Till many a youth thy fate to hear
Shall weep—nor youth alone,
But age shall shed the pitying tear
O'er Condé's gallant son.

The Duke D'Enghien was illegally arrested by the orders of Napoleon Bonaparte, on a false charge of conspiracy, and shot in the fortress of Vincennes, near Paris, at 6 o'clock in the morning of March 21, 1804. He was a direct descendant of the great Condé, the celebrated general and powerful nobleman in the reign of Louis XIV. Condé was born 1621, and died 1686. When only twenty-two years of age he won the memorable battle of Rocroi over the Spaniards.

JAMES NASMYTH.

1. James Nasmyth, the inventor of the steam-hammer, was born in Edinburgh in 1808, and in due time became a pupil at the High School of that city. He has himself given an account of his early life, from which some extracts have been taken.

2. "I had the good luck," he says, "to have for a school companion the son of an iron-founder. Every spare hour that I could command was devoted to visits to his father's iron-foundry, where I delighted to watch the various processes in the manufacture of iron, and in other smith and metal work; and although I was only about twelve years old at the time, I used to lend a hand, in which hearty zeal did a good deal to make up for want of strength. I look back to the Saturday afternoons spent in the workshops of that small foundry as an important part of my education. I did not trust to reading about such and such things; I saw and handled them; and all the ideas in connection with them became permanent in my mind.

3. "My first essay at making a steam-engine was when I was fifteen. I then made a real small working steam-engine, which not only could act, but really did some useful work: for I made it grind the oil-colours which my father required for his painting. Steam-engine models, now so common, were exceedingly scarce in these days, and very difficult to be had; and, as the demand for them arose, I found it both delightful and profitable to make them.

4. "With the results of the sale of such models I was enabled to pay the price of tickets of admission to the lectures on natural philosophy and chemistry delivered in the University of Edinburgh. About the same time (1826) I was so happy as to be employed by Professor Leslie in making models and portions of apparatus required by him for his lectures and philosophical investigations, and I had also the inestimable good fortune to secure his friendship.

5. "The earnest desire which I cherished of getting forward in the real business of life induced me to turn

my attention to obtaining employment in some of the great engineering establishments of the day, at the head of which stood that of Henry Maudslay of London. It was the summit of my ambition to get work in that establishment; but as my father had not the means of paying a premium, I determined to try what I could do towards attaining my object by submitting to Mr. Maudslay actual specimens of my capability as a young workman and draughtsman.

6. "To this end I set to work and made a small steam-engine, every part of which was the result of my own handiwork, including the casting and the forging of the several parts. Armed with such means of obtaining the good opinion of the great Henry Maudslay, on the 19th of May, 1829, I sailed for London, and after an eight days' voyage saw the metropolis for the first time.

7. "I made bold to call on Mr. Maudslay, and told him my simple tale. He desired me to bring my models for him to look at. I did so; and when he came to me I could see by the expression of his cheerful, well-remembered countenance, that I had attained my object.

8. "He then and there appointed me to be his own private workman, to assist him in his little paradise of a workshop. He left me to arrange as to wages with his chief cashier, and on the first Saturday evening I accordingly went to the counting-house to inquire of him about my pay. He asked me what would satisfy me. Knowing the value of the situation I had obtained, and having a very modest notion of my worthiness to occupy it, I said that if he would not consider ten shillings a week too much, I thought I could do very well with that. I had determined not to cost my father another farthing when I left home to begin the world on my own account. My proposal was at once acceded to.

And well do I remember the pride and delight I felt when I carried to my three-shilling-a-week lodging that night my first wages. Ample they were in my idea: for I knew how little I could live on, and was persuaded that by strict economy I could easily make the money support me.

9. "To help me in this object, I contrived a small cooking apparatus, which I forthwith got made by a tinsmith in Lambeth, at a cost of six shillings, and by its aid I managed to keep the eating and drinking part of my private account under three shillings and sixpence per week, or four shillings at the outside. I had three meat dinners a week, and generally four rice and milk dinners—all of which were cooked by my little apparatus, which I set in action after breakfast.

10. "After the first year my wages were raised to fifteen shillings a week, and I then, but not till then, indulged in the luxury of butter to my bread at breakfast. I am the more particular in all this, to show you that I was a thrifty housekeeper, although only a lodger in a small room. I have the old apparatus by me yet, and I shall have another dinner out of it ere I am a year older, out of regard to days that were full of the real romance of life."

11. Nasmyth remained in this situation until Maudslay's death in 1831. After a short residence in Edinburgh, where he was busily employed in preparing for his own commencement in business, he rented a portion of an old mill in Manchester in 1834, and began for himself. The floor of the building soon became too weak to hold his increasing stock, and after two years he was obliged to look out for larger premises. He erected more suitable mills at Patricroft, where he worked successfully until the year 1856, when he retired—not to a useless, idle life, but to

a life of honoured and congenial employment. He cultivated the taste for drawing which he had inherited from his father, and he pursued with no little distinction the difficult but engrossing study of astronomy.

12. The story of the origin of the Steam-Hammer is an interesting one. In the year 1837 the question of crossing the Atlantic by means of steam vessels was causing considerable excitement. Already this had been proved possible, and a vessel was now being specially built for traffic between England and America. A difficulty arose with respect to the enormous paddle-shaft of the vessel, which was to be a forging larger than any that had ever before been executed. No engineering firm would undertake so large a forging. Mr. Nasmyth was applied to. In thinking over the matter, he perceived that the existing hammers were unable to execute such a work, and that one of a totally different construction was necessary. Very quickly the idea of the Steam-Hammer presented itself to his mind, and the plan of it was fully sketched out on paper. But in the meantime a different system was determined upon for the vessel, and the enormous paddle-shaft was never forged. The idea of the Steam-Hammer was left for a time. Trade was depressed, and no one seemed to care to spend the money requisite for its construction.

13. While matters were in this state some gentlemen from the great Creuzot Ironworks in France called at the Patricroft Works to order some tools. Mr. Nasmyth was absent, but his partner, Mr. Gaskell, showed them all the interesting things in the works, and also brought out the drawings of the proposed Steam-Hammer. One of the gentlemen, M. Bourdon, was much struck with its simplicity and value, and took careful note of its arrangements. Mr. Nasmyth on his return was told of this *visit*, but no mention was made about the visitors having

seen the plans and drawings of the Steam-Hammer. In 1840 Mr. Nasmyth visited the Creuzot Works with M. Bourdon. He observed a crank-shaft of unusual size, and he at once asked, "How did you forge that shaft?"



M. Bourdon's answer was, "Why, with your hammer, to be sure!" Great indeed was Mr. Nasmyth's surprise to see his own idea fully carried out, and his own hammer successfully at work. The mystery was easily explained. *Very soon the hammer was in universal use, both at*

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12. The story is interesting on the subject of the Atlantic cable. It is a considerable expense, and a traffic between the two continents with respect to

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congenial, adapted to his tastes.
inherited, derived from.

~~engrossing~~, taking up all his time.

middle-shaft, the shaft or revolving bar that turns the paddle-wheels.

Deuzot Ironworks, very large ironworks in the east of France.

Q. Now, I am going to ask you to read the letter from James Nasmyth specially concerning the letter from Nasmyth born? Where was he living during his school-days of 1840-1841? How did he raise the money to go to the university? Into what business did he go? How did he accomplish his business in this situation. Where did he occupy his time after 1841? Did he suggest the idea of the steam engine? How was the idea finally suggested?

May its broad furrow still unbind
To genial rains, to sun and wind,
The most productive soil!

3. Clang! clang!—our colter's course shall be
On many a sweet and sunny lea,
By many a streamlet's silver tide,
Amidst the song of morning birds,
Amidst the low of sauntering herds,
Amidst soft breezes which do stray
Through woodbine hedges and sweet may,
Along the green hill's side.

4. When regal Autumn's bounteous hand,
With wide-spread glory clothes the land,
When, to the valleys, from the towers
Of each resplendent slope, is poured
A ruddy sea of living gold,
We bless,—we bless the Ploughman.

Clang! clang!—again, our mates, our mates,
Beneath the hammer's potent blow,
At clank!—we forge the flint, the flint,
Which bears the gallant reaper's sword,
Which whisks and whistles round
The good-clothed reaper's head,
And the scythe, and the scythe,
And the scythe on her sides.

And more, the reaper's son
Who darkens the horizon,
Who on the hill;

And through far away
He comes his way,
His way.

home and abroad, and the reputation of James Nasmyth was securely established.

permanent, fixed firmly.
investigations, researches.
inestimable, very highly valued.
premium, a sum of money paid with an apprentice.
draughtsman, a man skilled in drawing.
acceded to, accepted.
thrifty, careful as to spending money.
ere, before.

Patricroft, a few miles from Manchester.
congenial, adapted to his tastes.
inherited, derived from.
engrossing, taking up all his time.
paddle-shaft, the shaft or revolving bar that turns the paddle-wheels.
Creuzot Ironworks, very large ironworks in the east of France.

With what tool is the name of James Nasmyth specially connected? When and where was Nasmyth born? Where was he educated? What opportunity had he during his school-days of learning something of iron working? How did he raise the money to obtain admission to the lectures in the university? Into what firm did he wish to gain admission? How did he accomplish his object? Describe his mode of life while in this situation. Where did he finally settle in business? How did he occupy his time after his retirement from business? What first suggested the idea of the steam-hammer? State under what circumstances the idea was finally carried out.

SONG OF THE FORGE.

1. Clang! clang! the massive anvils ring;
 Clang! clang! a hundred hammers swing—
 Like the thunder-rattle of a tropic sky,
 The mighty blows still multiply:
 Clang! clang!
 Say, brothers of the dusky brow,
 What are your strong arms forging now?
2. Clang! clang!—we forge the colter now—
 The colter of the kindly plough;
 Benignant Father, bless our toil!

May its broad furrow still unbind
To genial rains, to sun and wind,
The most productive soil!

3. Clang! clang!—our colter's course shall be
On many a sweet and sunny lea,
By many a streamlet's silver tide,
Amidst the song of morning birds,
Amidst the low of sauntering herds,
Amidst soft breezes which do stray
Through woodbine hedges and sweet may,
Along the green hill's side.
4. When regal Autumn's bounteous hand,
With wide-spread glory clothes the land,—
When, to the valleys, from the brow
Of each resplendent slope, is rolled
A ruddy sea of living gold,
We bless,—we bless the Plough.
5. Clang! clang!—again, my mates, what glows
Beneath the hammer's potent blows?
Clink! clank!—we forge the giant chain,
Which bears the gallant vessel's strain
'Midst stormy winds and adverse tides;
Secured by this, the good ship braves
The rocky roadstead, and the waves
Which thunder on her sides.
6. Anxious no more, the merchant sees
The mist drive dark before the breeze,
The storm-cloud on the hill;
Calmly he rests, though far away
In boisterous climes his vessel lay—
Reliant on our skill.

7. Say, on what sands these links shall sleep,
Fathoms beneath the solemn deep?—
By Afric's pestilential shore;—
By many an iceberg lone and hoar;—
By many a palmy western isle,
Basking in spring's perpetual smile;—
By stormy Labrador?



8. Say, shall they feel the vessel reel,
When, to the battery's deadly peal,
The crashing broadside makes reply?
Or else, as at the glorious Nile,
Hold grappling ships, that strive the while,
For death or victory?

9. Hurrah!—cling! clang!—once more, what glows,
 Dark brothers of the forge, beneath
 The iron tempest of your blows,
 The furnace's red breath?
10. Clang! clang!—a burning torrent, clear
 And brilliant, of bright sparks is poured
 Around and up in the dusky air,
 As our hammers forge the Sword.
1. The sword! a name of dread; yet when
 Upon the freeman's thigh 'tis bound—
 While for his altar and his hearth,
 While for the land that gave him birth,
 The war-drums roll, the trumpets sound,—
 How sacred is it then!
2. Whenever, for the truth and right,
 It flashes in the van of fight—
 Whether in some wild mountain-pass,
 As that where fell Leonidas;
 Or on some sterile plain, and stern,
 A Marston or a Bannockburn;
 Or 'mid fierce crags and bursting rills,
 The Switzer's Alps, gray Tyrol's hills
 Or, as, when sunk the Armada's pride.
 It gleams above the stormy tide;—
 Still, still, whene'er the battle-word
 Is *Liberty!* when men do stand
 For justice and their native land—
 Then Heaven bless the *Sword*.

er, the fore-iron of the plough
 th a sharp edge to cut the
 d.
 , the flower of the hawthorn.

regal, kingly, royal.
 potent, powerful.
 adverse, acting in a contrary
 direction.

roadstead, a place where ships may ride at anchor.

reliant, trustful.

pestilential, poisonous, tending to produce disease.

Nile, a river in Egypt, near one of the mouths of which the battle of the Nile was fought, Aug. 1, 1798, between the English, under Lord Nelson, and the French, under Admiral Brueys—the former gaining a complete victory.

Leonidas, King of Sparta, noted for his defence of the pass of

Thermopylæ against Xerxes, 489 B.C.

Marston Moor, a plain near York where the Parliamentarians gained a decisive victory over the Royalists in 1644.

Bannockburn, a town in Scotland famous for the great victory gained near it, 1314, by the Scots under Bruce over the English commanded by Edward II.

Armada, the Spanish fleet, intended to act against England, 1588.

KNOWLEDGE AND SKILL.

1. Surrounded, as we are in our own country, with the wonderful achievements of industry in alliance with knowledge and skill, we must look to other parts of the globe for evidence of what labour, unaided by knowledge and skill, is able to accomplish. An exploring excursion to a few of the departments of industrial employment will throw a strong light upon the mighty difference between what labour, aided by knowledge and skill, is able to produce, and what is only produced by labour alone, without the aid of these auxiliaries.

2. Let us visit a farm. We observe beautiful fields of wheat and other grain, and of roots and grasses. We happen to know that green food is abundant, while grain is somewhat scarcer than usual. In our ignorance, we ask the farmer why, under such circumstances, he has not grown more corn and less clover; to which he replies, "I had an excellent crop of barley last year, where you see that luxuriant clover. Had I sown the field with *wheat* or *barley*, I should now probably see a thin and

sickly crop that would not repay the labour of reaping; whereas, yonder stack of clover has already come off this field, leaving the promise of another nearly as good, and a fair bite for the sheep afterwards."

3. Our inquiries make us acquainted with the attention he pays, not only to the rotation of his crops, but to the selection of his seed and manures, and to the breeds and the feeding and housing of his cattle.

4. He points out to us the man upon whom he relies for the care and management of his live stock. This man is fond of the animals, and they are as much attached to him. He understands their habits, and everything essential to their keep in health, and to their treatment in disease. At the plough and at field labour he is not to be compared to the man whom you see at the other side of the hedge. What a furrow that man draws! You could not make a straighter line with your pencil and ruler.

5. The farmer would laugh at us if we were to ask him why he does not grow beetroot for sugar, and coffee, tea, and cotton. He would think we ought to know that a larger quantity of sugar can be obtained, with the same amount of labour, in a different manner; and that the growth of coffee, tea, and cotton, being unsuited to our climate, the thoughtless man, who should attempt to act in defiance of the peculiarities of plants and climate, would have to suffer the penalty of his ignorance or recklessness.

6. While we contemplated and admired all his tools, from the humble spade and rake up to the ploughs of various shapes and sizes, to the harrows and rollers, to his drilling and thrashing machines, and to his movable steam-engine, our thoughts could not but wander back to the crops gathered in by the ancient Britons, who may

have occupied the same spot of ground, and we could not avoid making a comparison between them and those of the well-informed skilful man whose farm we had the gratification of visiting.

7. Turn in what direction we will, after quitting the farm where we have observed the methods adopted by industry, knowledge, and skill in combination, to produce abundance of the raw material, out of which are extracted and manufactured the necessities and comforts of life, we are met by never-ending proofs of the increased power imparted to industry by knowledge and skill.

8. We want our wheat transformed into palatable food. Knowledge comes to the aid of industry at the mill, the revolving stone in which is moved by water, wind, or steam. The wheat is ground, the flour is separated from the bran, and the baker, with his oven, completes the work. We want our wool and flax transformed into garments. Again knowledge and skill enable industry to apply the motive power of steam to the processes of spinning and weaving, preparatory to the labour of the tailor and sempstress.

9. In like manner we may follow the skins of the various animals slaughtered for food to the tanners and curriers, who, respectively armed with their special knowledge and skill, hand over to the shoe and harness maker the material on which their intelligent and skilful labour is to be exercised.

10. But we have other raw material besides that coming from the farm. There is the produce of the mines and of the clay-fields and sand-beds: of mines, that would be inaccessible if the power of steam could not be brought to drain them; of stiff fields and sandy wastes, which would be despised but for the knowledge and skill that are able *to convert* clay and sand into earthenware and glass.

11. Many of the articles of dress and furniture in daily use are made from materials which are only to be found far apart from one another, and which accordingly must be brought together. Wind and steam again lend their power, under the guidance and control of knowledge and skill, to bring this about by moving our ships and railway trucks. There are difficulties to be overcome in order to make materials unite after they have been brought together. The chemist and electrician come to the rescue.

12. The researches and experiments made in their studies and laboratories have shown where union can, and where it cannot be effected, and the combining proportions of different materials. Finally, the magnetic needles communicate the wants and transmit the information, without which success would be deferred, or might even be prevented.

13. Even this very cursory glance at the part played by knowledge and skill in industrial life must be more than sufficient to convince all reflecting persons that twenty millions of inhabitants could not exist in this island if past labour had not been greatly aided by knowledge and skill. The same aids to labour are just as much required to enable this number to live in the future. There are many, unfortunately, whose participation in the general knowledge and skill is exceedingly slight. Their labour is inadequate to replace the whole of what they consume.

14. Of these, some, through defective organization or other causes, have never been capable of acquiring either knowledge or skill; others, through the neglect of which they were victims in infancy or childhood, have never been taught, nor even trained to the capacity of learning; and they may be considered almost as much shut out from knowledge and skill as if they had been born defectively organized. The means of subsistence for

individuals and classes thus unfavourably circumstanced must be provided, partially, at all events, by the knowledge and skill of their more fortunate countrymen.

15. When the industrious man directs his work to useful objects, and in the best manner, we call him instructed and skilful; we say he possesses the qualities of knowledge and skill. We admire these qualities in others and are glad to encourage them; and if we would participate in the well-being derivable from an abundance of the necessities and comforts of life, from the affection and esteem of our neighbours and friends, and from our own self-respect, we ought to cultivate these qualities in ourselves.—*Dean Daves.*

achievements, performances.

alliance, connection with.

exploring, searching.

excursion, journey.

auxiliaries, helps.

luxuriant, very abundant.

rotation, regular order.

selection, picking out or choosing.

essential, necessary.

furrow, the cut made by the plough.

defiance, opposition.

peculiarities, singularities.

penalty, punishment.

contemplated, considered.

comparison, to liken one to another.

gratification, pleasure.

extracted, taken out.

transformed, changed.

palatable, agreeable to the taste.

revolving, turning round.

guidance, direction.

trucks, carriages.

electrician, one who understands electricity.

laboratories, chemists' workshops.

cursor, slight.

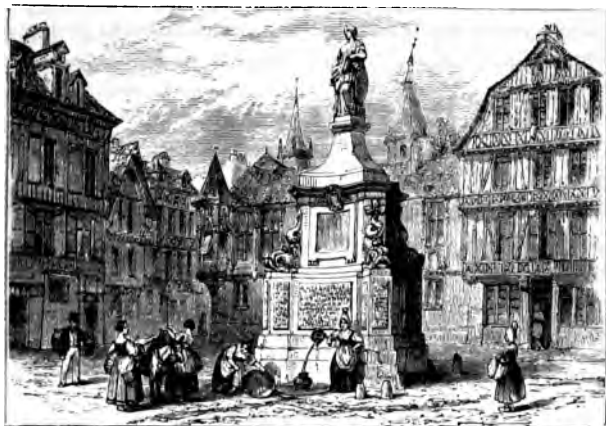
participation, the act of sharing.

inadequate, insufficient.

defective, deficient.

organization, constitution or natural abilities.

What two powers have assisted industry in the accomplishment of beneficial labour? How does the farmer show knowledge and skill in the management of his farm? Why does the farmer in our country not cultivate tea and coffee? What advantage has the farmer at the present day over the ancient Briton, who perhaps cultivated the very same ground? Name some ways in which skill and knowledge enable us to make the raw material into the manufactured article. Why should we always encourage industry?



Monument to Joan of Arc at Rouen.

JOAN OF ARC.

1. In the first half of the fifteenth century the condition of France seemed almost hopeless. The English king, Henry V., had won the great victory of Agincourt in 1415. This victory led to a series of campaigns which brought all the northern part of France completely into his power. His sudden death in 1422 prevented the complete subjugation of the remaining part of the country. The successor of Henry V.—Henry VI.—was but an infant, and for a time the course of French conquest was delayed by English factions. The south of France remained loyal to their rightful king, Charles VII., who, as he had not yet been crowned, was known by the title of Dauphin.

2. In 1428 the Duke of Bedford, brother of Henry V. and Regent of France, determined to cross the Loire, which divided the dominions of the Dauphin from those

which acknowledged the English supremacy. As a preparatory step the important city of Orleans was besieged. The Dauphin had done but little to assist the besieged town. Despair seemed to have unnerved both the sovereign and the people. The besieging force was really very small, but such was the terror inspired by the English name that, during a six months' siege, not a single sally was attempted from the town, and famine had at last compelled the besieged and panic-stricken inhabitants to make offers of surrender

3. At this eventful crisis the tide of fortune was changed by the appearance of a young peasant girl at the court of the Dauphin in the Castle of Chinon, south of the Loire. This girl's name was Joan of Arc.

4. She was the daughter of a labourer of Domremy, a small village near Vaucouleurs, in the N.E. of France, and was now in her eighteenth year. She was a simple, country girl, fond of the forest near her father's cottage, tender to the sick and poor, and an ardent lover of the services of her village church. But her quiet home-life was broken by the sounds and sights of war. One absorbing passion filled her soul. She had pity, as she was always repeating, on the fair realm of France. In her simple, childlike faith she believed she saw visions, and heard divine voices, bidding her rise and save her down-trodden country. She wept, but she felt sure that her mission was clear. Her father was angry at the idea. The priest of Vaucouleurs, to whom she confided her story of visions and sounds, refused to help her. "I had far rather rest and spin by my mother's side," she said, "for this is no work of my choosing, but I must go and do it, for my Lord wills it."

5. At last all obstacles were overcome. The Dauphin received her at Chinon amid a throng of nobles and

soldiers. She assured the Dauphin that he should be crowned at Rheims, where the French Kings were usually crowned, but which at that time was in the hands of the English.

Her first care was to relieve the besieged city of Orleans. Full of the strength and vigour of her peasant training, accustomed to fatigue and hardships, clad in white armour, with a large white banner in her hand, she placed herself at the head of ten thousand men-at-arms, and led them to the famine-stricken city.

6. The besiegers were overawed at her presence. Her enthusiasm, her proud confidence in her country's future, her simple faith, spread among her countrymen; the hesitating generals were aroused by the example of her enthusiasm to attack the small handful of besiegers, and in a very short time Orleans was saved. The Maid of Orleans, as Joan of Arc has ever since been called, was wounded, but not seriously.

7. She was resolved to fulfil the task which she devoutly believed was assigned to her by Heaven. While the English remained panic-stricken round Paris, she brought the Dauphin to Rheims, where he was crowned King of France, while the Maid stood by his side.

Joan now believed her mission was at an end, and begged to be permitted to return to her cottage home at Domremy to keep her flocks and herds as before, and do all things as she was wont to do. But the king would not hear of this. She was at last taken captive and given up to the Duke of Bedford, and after a year's cruel imprisonment was burnt to death at Rouen in 1431, to the lasting disgrace of all concerned.

8. But the cause of England was utterly lost. Gradually all her conquests in France were torn from her, and nothing remained of all the victories of Edward III. or of

Henry V. but the town of Calais. Not only were all these temporary conquests lost, but the great southern province which had belonged to England ever since the marriage of Henry II. to Eleanor of Aquitaine, was recovered, and France became a greater and more powerful kingdom than she had ever been before. Calais remained in the hands of the English until 1558, when it was taken by the Duke of Guise.

campaigns, the times during which an army keeps the field every year during war.

subjugation, conquest by force.

factions, party quarrels.

Dauphin, a title given to the eldest son of the French king.

regent, one who governs the

kingdom during the minority of the king.

supremacy, highest authority.

absorbing, engaging wholly or engrossing.

obstacles, hindrances.

Rheims, 82 miles E.N.E. from Paris.

overawed, restrained by fear.

Describe the condition of France in the fifteenth century. Who was the Duke of Bedford? What city did he besiege, and for how long? Who was Joan of Arc? Relate her interview with the Dauphin. Describe her relief of Orleans. What request did she make of the king after he was crowned? When Joan of Arc was taken prisoner how was she treated? When and where did she die?

JOAN OF ARC'S ADDRESS.

TRANSLATED FROM SCHILLER'S "JUNGFRAU VON ORLEANS" BY
ANNA SWANWICK, IN BOHN'S STANDARD LIBRARY.

1. Farewell, ye mountains, ye beloved glades,
Ye lone and peaceful valleys, fare ye well!
Through you Johanna never more may stray!
For aye Johanna bids you now farewell.
Ye meads which I have water'd, and ye trees
Which I have planted, still in beauty bloom!
Farewell, ye grottos, and ye crystal springs!
Sweet echo, vocal spirit of the vale,

Who sang'st responsive to my simple strain,
Johanna goes, and ne'er returns again.



Birthplace of Joan of Arc.

2. Ye scenes where all my tranquil joys I knew,
For ever now I leave you far behind!
Poor foldless lambs, no shepherd now have you!
O'er the wide heath stray henceforth unconfin'd!
For I to danger's field, of crimson hue,
Am summon'd hence, another flock to find.
Such is to me the Spirit's high behest;
No earthly vain ambition fires my breast.
3. For who in glory did on Horeb's height
Descend to Moses in the bush of flame,
And bade him go and stand in Pharaoh's sight—
Who once to Israel's pious shepherd came,
And sent him forth, his champion in the fight,—

Who aye hath loved the lowly shepherd train,—
 He, from these leafy boughs, thus spake to me,
 “Go forth! Thou shalt on earth my witness be.

4. “Thou in rude armour must thy limbs invest,
 A plate of steel upon thy bosom wear;
 Vain earthly love may never stir thy breast,
 Nor passion’s sinful glow be kindled there.
 Ne’er with the bride-wreath shall thy locks be dress’d,
 Nor on thy bosom bloom an infant fair;
 But war’s triumphant glory shall be thine;
 Thy martial fame all women’s shall outshine.

5. “For when in fight the stoutest hearts despair,
 When direful ruin threatens France, forlorn,
 Then thou aloft my oriflamme shalt bear,
 And swiftly as the reaper mows the corn,
 Thou shalt lay low the haughty conqueror;
 His fortune’s wheel thou rapidly shalt turn,
 To Gaul’s heroic sons deliv’rance bring,
 Relieve beleaguer’d Rheims, and crown thy king!”

6. The heavenly Spirit promised me a sign;
 He sends the helmet, it hath come from him,
 Its iron fillet me with strength divine,
 I feel the courage of the cherubim;
 As with the rushing of a mighty wind
 It drives me forth to join the battle’s din;
 The clanging trumpets sound, the chargers rear,
 And the loud war-cry thunders in mine ear.

aye, ever.
 behest, declared will.
 invest, clothe.
 martial, warlike.
 direful, dreadful.

oriflamme, the ancient royal
 standard of France.
 Gaul, ancient name of France.
 beleaguer’d, surrounded by an
 army.

INDUSTRY.

1. If we can learn what we must do in order to secure the means of future subsistence, we shall also learn what has already been done to put us in possession of the means of present subsistence. The principal of these means are food, clothing, fuel, and shelter.

2. Let us examine our position in respect of food. We have, perhaps, a stock of bread that might last us for three or four days; during these three or four days more flour must be made into bread. We have a stock of flour that might last us for two or three months; during this period more wheat must be ground into flour. We have a stock of wheat that might last us, according to the season of the year, from twelve to twenty months; during this period we must till the earth, sow the seed, reap and thrash, in order to procure more wheat. Our store of cooked meat would probably last as long as our stock of bread. More meat must be cooked to supply the place of what is consumed. Sheep, oxen, and other animals must be slaughtered to provide more meat; and to replace these, others must be reared and fed, and the land must be cultivated to produce the food which these animals consume day by day.

3. From food, let us turn our thoughts to clothing. We may suppose ourselves to have clothes sufficient to serve for six months; during this period we must work at cutting and fitting the cloth and other materials already prepared for the purpose. Spinning and weaving, tanning and dyeing, must proceed to replace the materials thus cut up. Sheep-shearing, cotton-picking, flax and hemp dressing, silk-winding, and other operations must be going forward to supply the raw materials for future

manufacture, these to be replaced, as fast as manufactured, by planting and other agricultural work.

4. Even the houses which shelter us, durable as they are, compared with the food which we eat and the clothes which we wear out, are not imperishable; some are of long standing, others are more modern. But while we live in them, the process of decay is slowly but surely going on; and if we would not be left without shelter, we must be attentive to repair, to paint, and to rebuild. For these purposes trees must be felled and sawn up, bricks must be made, paints manufactured, and slates and stones quarried and shaped.

5. We may trace back in the same way, step by step, everything that has to be done to replace all the other necessities and comforts which are perpetually disappearing while they minister to our well-being. The maintenance of our furniture, utensils, and tools depends upon the continued performance of all those stages of work that descend from the last touch or polish that specially fits them for use to the first stroke of the pick-axe which detaches the mineral from the earth.

6. It may be remarked that there are many persons who do not labour, and that there were many persons also who did not labour in times past; and yet we do not expect that the former will fail to share in the necessities and comforts of life, as we know that the latter did share. This is true. One large portion of mankind cannot labour. All mankind in their tender years are incapable of labour, and there are some who, from defective organization, or other causes, are ever incapable. Nevertheless, all these, the young and the impotent, subsist upon the produce of past labour, and their future subsistence depends upon present and continued labour.

7. If nobody had worked in the past, nobody could

subsist now; and if labour were discontinued, the means of subsistence would soon disappear. From one conclusion there is no escape, and that is, that in proportion as the number is great of those who have not laboured, must the performance of those who did labour have been effective; and in proportion to the number of those among us now who perform no labour, must be the productive power of those who perform the whole.

8. There always must be a considerable proportion of mankind incapable of labour. The truth of this proposition is unquestionable; it is also true that there are many who are not incapable, who either do not labour at all, or whose labour is far short of that which is performed by others to whom they are equal in strength. There are, besides, some of those incapable of labour who have become so, not unavoidably, but from causes which might have been prevented.

9. A portion of those who do not labour—the young—may be better employed in fitting themselves for future work than in attempting present work. If, while living on the produce of other people's labour, they increase their own productive power, and afterwards exert it, they add more, eventually, to the general stock of necessities and comforts than they subtract from it in the beginning. Taking, however, the adult and infant, the capable and incapable, the workers and non-workers, together, the larger number of those who are not labouring and preparing to labour, the more severe must be the work of those upon whom the whole labour devolves.

10. We are now prepared to state, as one of the results of our investigation, that it appears to be indispensable for the well-being of mankind that the ability and disposition to labour should prevail widely. We have a name for those men who labour cheerfully and assiduously

—we call them “industrious.” We say they possess industry. Industry, accordingly, is one of those qualities which we admire and love to observe and to encourage in others, and which all good men, especially the young, strive to cultivate in themselves. We number it among the virtues, because it conduces to the general well-being.

11. Another adjective, “industrial” (pertaining to the production of the necessities and comforts of life), has been formed from the same word. We call labour and employment industrial, when we wish to distinguish them from other kinds of labour and employment; and in the same way we speak of industrial life, and also of industrial success, one of the foremost conditions of which is, “industry.”—*Dean Dawes.*

subsistence, means of support.
consumed, eaten up.
spinning, making thread.
weaving, making cloth.
tanning, making leather.
operations, employments.
agricultural, belonging to a farm.
imperishable, cannot be destroyed.
perpetually, always.
minister, serve.
maintenance, keeping up in good order.

detaches, separates.
incapable, not able.
defective, deficient.
organization, constitution.
impotent, helpless.
eventually, finally.
investigation, examination.
indispensable, necessary.
assiduously, diligently.
conduces, contributes.
pertaining, belonging.
distinguish, to note the difference.

What four things are necessary to our subsistence? What are our chief articles of food? How is the supply of these articles kept up? What industrial operations have to be performed to supply us with clothes? What persons are incapable of labour? How do these persons subsist? What name do we give to those that labour cheerfully and assiduously?



TEACHINGS OF NATURE.

1. The seasons came and went, and went and came,
To teach man gratitude; and, as they passed,
Gave warning of the lapse of time, that else
Had stolen unheeded by: the gentle flowers
Retired, and, stooping o'er the wilderness,
Talked of humility, and peace and love.
The dews came down unseen at evening tide,
And silently their bounties shed, to teach
Mankind unostentatious charity.



2. With arm in arm the forest rose on high,
And lesson gave of brotherly regard;

And, on the rugged mountain brow reposed,
Bearing the blast alone, the ancient oak
Stood, lifting high his mighty arm, and still
To courage in distress exhorted loud,
The flocks, the herds, the birds, the streams, the
breeze,
Attuned the heart to melody and love.

3. Mercy stood in the cloud, with eye that wept
Essential love; and, from her glorious brow,
Bending to kiss the earth in token of peace,
With her own lips, her gracious lips, which God
Of sweetest accent made, she whispered still,
She whispered to Revenge, Forgive! forgive!
4. The sun, rejoicing round the earth, announced
Daily the wisdom, power, and love of God.
The morn awoke, and, from her maiden face,
Shedding her cloudy locks, looked meekly forth,
And, with her virgin stars, walked in the heavens,—
Walked nightly there, conversing as she walked
Of purity, and holiness, and God.
5. In dreams and visions, sleep instructed much,
Day uttereth speech to day, and night to night
Taught knowledge: silence had a tongue: the grave,
The darkness, and the lonely waste, had each
A tongue, that ever said, Man! think of God!
Think of thyself! think of eternity!

—*R. Pollok.*



THE ARCTIC EXPEDITION OF 1875-76 IN SEARCH OF THE NORTH POLE.

PART I.

1. The objects of this expedition, fitted up and sent out by the English government, were to get to, or as near as possible to, the North Pole, to examine, and collect specimens of the minerals, vegetables, and animals found in these regions, and lastly, to settle the vexed question as to whether round the Pole itself there was land, an open sea, or a sea of eternal ice.

2. Many Arctic expeditions have during the past century sailed from our shores, but these have had for their chief object the discovery of a north-west passage into the Pacific Ocean. One of the most successful of the Arctic explorers was Sir John Franklin, who made many voyages of discovery to these regions between the years 1819 and 1844.

3. His last expedition was made in the year 1845 with two ships, the *Erebus* and *Terror*. When he had been absent about three years, and no tidings had been heard of him, the nation exhibited much anxiety as to his fate. Between the years 1848 and 1855 no fewer than seventeen expeditions from this country, and three from the United States of America, were sent out in search of him. Vague rumours came from time to time to this country of traces of him having been found.

4. Dr. Rae, an American explorer, bought articles from the Esquimaux, which were known to have belonged to his ships. It was not, however, until the year 1859 that Sir Leopold M'Clintock came back with the news that a tin case had been discovered that had been hidden

in a cave, in which he had found a written account of the destruction of the ships by icebergs, and of the death of Sir John Franklin. It had been placed there by one of the explorers, who afterwards met his death like the rest of his companions by exposure to cold and famine.

5. These Arctic expeditions did much to familiarize this country with Arctic research, but they did little to open up the countries or seas around the Pole; indeed, the place where Sir John Franklin met his death was only about half-way between England and the North Pole.

6. In 1874 the government, on the recommendation of several scientific societies, determined to fit out an expedition at the cost of the nation to explore the Polar regions. No expense was spared in the fitting out of the ships, and everything was done on the advice of the most eminent Arctic explorers to ensure its success.



7. The ships chosen for this hazardous expedition were built of wood, and were specially strengthened by a lining of teak. On the top of one of the masts a sort of barrel was fixed. This was called the "crow's nest," and was used for the man on "look out." He sat up there and directed the course of the vessel in the intricate channels amongst the ice.

8. Every precaution was taken for the preservation of the health of both officers and men. Thick suits of warm clothing, and gloves lined with fur, were served out to all. Wooden shoes were taken to wear when the men

walked on the ice, and spectacles to preserve their eyes from snow blindness.

Tents were taken for the men to sleep in when they made sledge journeys on the ice, and also portable stoves to be heated with spirits of wine to supply warmth, and as a means of cooking their food; in short, everything was taken that could be suggested, to ward off the effects of the cold.

9. Provisions in abundance were supplied to both ships, consisting mostly of preserved meats and *pemmican*, a kind of food much used in these cold climates composed of a mixture of meat and vegetables.

Sledges were also taken in case the seas around the Pole should be covered with ice. Some of these were constructed to be drawn by men, others by dogs. Indeed all that science and experience could do to make the expedition perfect was done.

The ships were named the *Alert* and the *Discovery*, and the command was given to Sir George Nares, an experienced officer who had shortly before commanded the *Challenger* in her scientific voyage around the world.

10. The ships left Portsmouth on the 29th of May, 1875, amidst the acclamations of a large concourse of people who had assembled to witness their departure. Many anxious eyes were fixed on them, as decked with flags they steamed out of the harbour. Amongst that large crowd were some who had fathers or brothers on board, and as the part of the world to which the ships were bound was unknown, many feared that it was the last time they would see either the ships or their crews. The whole nation, indeed, felt interested in the expedition, and the Queen herself sent a telegram to the commander wishing him success.

North-west passage, a passage from the Atlantic to the Pacific along the north coast of America.

explorers, those who seek to discover.

Esquimaux, a diminutive race inhabiting the Polar region.

Sir John Franklin, **Sir Leopold**

M'Clintock, celebrated Arctic explorers whose chief object was to discover the north-west passage.

icebergs, large elevated masses of floating ice.

familiarize, to make acquainted with.

hazardous, dangerous.

teak, a hard kind of wood chiefly found in India.

intricate, difficult to pass through.

portable, that can be carried about.

sledges, carriages without wheels.
acclamations, shouts.

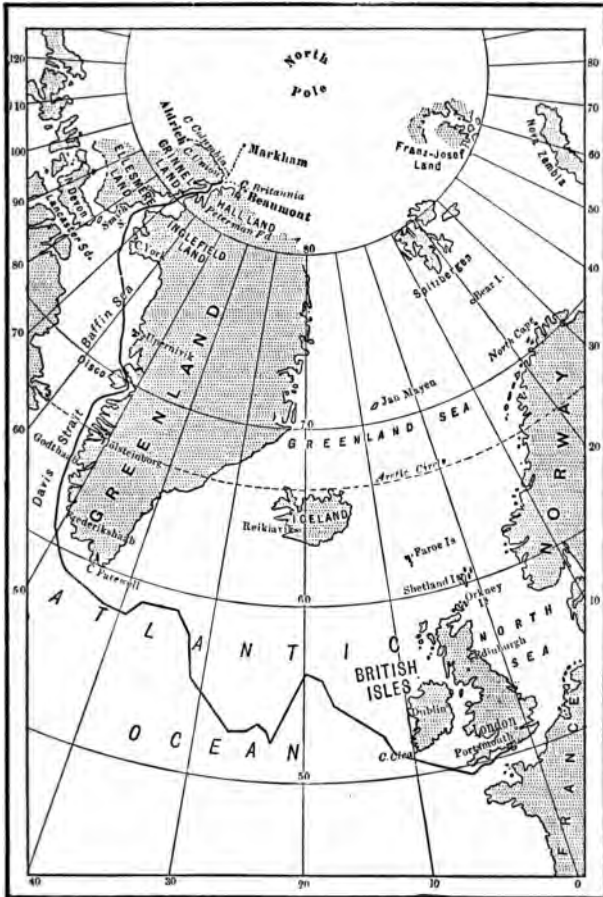
What were the chief objects of the Polar expedition? Name the chief object of former expeditions in visiting the Arctic regions. Who was one of the most successful Arctic explorers? What was his fate? Who discovered the records of Franklin's last expedition? Give a description of the ships selected for the Polar expedition. Describe the precautions taken to preserve the health of the men. What provisions were taken? What is pemmican? Why were sledges taken? In what year did the ships leave Portsmouth and under whose command?

THE ARCTIC EXPEDITION OF 1875-76.

PART II.

1. After leaving the coast of Ireland, a succession of severe gales separated the ships from each other. They, however, met off the foggy headland of Cape Desolation in Greenland, and soon afterwards entered the harbour of the Danish settlement of Disco. Here they took on board a supply of dogs to draw the sledges, and two well-known Esquimaux interpreters and dog drivers, "Fred" for the *Alert*, and "Hans" for the *Discovery*.

2. The last place they called at was Upernavik. This settlement is the most northerly in the known world. It is a Danish colony, and its chief characteristics are rocks and boulders, black houses with white window shutters,



Map to illustrate the Course of the "Alert" and the "Discovery."

and dogs. Crossing Melville Bay, the ships entered Smith's Channel, which was found filled with pack ice. They took refuge in a little rocky cove, which was for the

time named "Bide a Wee" harbour, from the number of times they had to turn back into it. Before long, however, a strong wind blew the ice a little off the south shore, and both ships rounding Cape Sabine, steamed westward as there was no road to the north.

3. Large mountains of ice were now to be seen on all sides of them, and one day the ships were in great danger from an immense iceberg, which drifted towards them and threatened to crush the ships to pieces. The danger appeared to be so imminent that the crews got their knapsacks and pocket valuables together to be prepared for the worst. Only the skill and patient watchfulness of officers and men saved the ships from destruction.

4. The ships now pressed on northwards through Smith's Sound and the Kennedy and Robeson Channels. Checks and delays were of daily occurrence. Every movement of the ice was watched, and every chance of steaming on eagerly seized. On the 22d of August a well sheltered and commodious bay was found on the north shores of Lady Franklin Strait, and here it was decided the *Discovery* should winter. A short time was spent in making preparations for the separation of the two ships, and on the 25th of August, the *Alert* amidst the hearty cheers of the crew of the *Discovery* steamed northwards.

5. It took the *Alert* three days to steam twenty miles, and in going this distance, the rudder was so crushed by icebergs, that it had to be changed for a spare one that was carried on deck. The 1st of September was a memorable day for the expedition. A south-south-westerly gale had sprung up during the previous night, and under its influence the broad floes of heavy ice separated from the steep cliffs under which the ship lay, leaving a long line of water, now widening and now narrowing, stretching along the shore into the unknown north.

6. The ship passed rapidly through under full steam, and with top-sails spread. Before noon she had passed several headlands. The land now trended to the westward, low undulating hills succeeded the cliffs of 1000 feet or more, along which she had passed. It snowed lightly, but not enough to conceal the fact that Robeson Channel was altogether behind, and that a broad ice-covered sea lay in front. It was not till afterwards that the true size of this sea of polar ice was ascertained. They were now obliged to stop.

7. Before them was a rugged wall of ice of from twenty to forty feet in height, further advance was therefore impossible. A channel of shallow water, however, led to a low point of land to the south. They sailed carefully down this channel and anchored in a little cove that was bounded by the shelving shore on one side, and on the other by a great iceberg that had grounded in the shallow water, and lay firmly fixed. Here it was decided the *Alert* should winter in latitude $82^{\circ} 27'$. This was farther north than had ever been reached by any other ship.

8. The land here was not absolutely barren, for the few sheltered spots gave protection to some very small specimens of the Arctic poppy now withered into a brilliant green. In one spot a tiny dwarfed Arctic willow was found with a stem no thicker than a crow-quill creeping flat amongst the stones. Snow-covered land spread southward and westward, and this rose in one place about eight miles off into two dome-shaped mountains.

9. Sledging parties were sent out to explore the region round about, but the men returned to the ships, suffering from such severe frost-bites that some of them were obliged to have one or two of their toes amputated.

10. Winter now set in, and the words "below zero"

began to be omitted in the daily statements of the temperature. The cold was so intense that those who dwell in this country can have but little idea of its severity. The sun was not seen for 142 days. Sometimes when the nights were clear, the stars were seen or the faint pale moon. At noon the dusky twilight was often a little brightened. Everything that goes to make up the interest of an Arctic winter, was absent in 82 degrees north; and darkness, ice, and cold, reigned supreme.

11. Snow houses were built for observatories, and the snow was banked up against the side of the ship to help to retain her heat. The daily winter routine of the men was muster on deck, succeeded by divine service, then parade for lime juice. Then followed regulation exercise, either by some occupation outside the ship, or walking a weary beat up and down a space marked out on a smooth piece of ice, with heaps of empty preserved meat tins placed at intervals to act as guides in the darkness. Many plans were adopted for keeping up the spirits of the men during this trying time. Entertainments were held, lectures given, and a night school was carried on by the officers.

12. When spring came the difficulties and dangers returned. It was quite settled that the only mode of reaching the Pole was by sledges. On the morning of the 3d of April, seven sledges, manned by fifty-three officers and men, fell into their places on the floe alongside of the ship. The sledges destined for the North Pole were under the command of Captain Markham. The way lay over ice and snow, and the road had to be cut with spades and pickaxes, before the dogs could draw the sledges over it. A temperature of more than 70 degrees below freezing-point was experienced the first week. Sledges and men sunk deeply into the snow. Although

all worked with a will, they only proceeded at the rate of a mile a day. The men now suffered the greatest hardships, and had to sleep in tents which were pitched on the ice. At last sickness broke out, and the interpreter Petersen was so badly frost-bitten, that he died. Seeing the impossibility of getting to the Pole by this



route, Captain Markham determined to return, and after incredible difficulties succeeded in getting back to the ship.

13. It now being evident that further progress to the north was absolutely impossible, Captain Nares decided to return home. The ice, however, remained firm until the 20th of July, when it began to show signs of breaking up. The ice around the ship was now blown up with gunpowder, and on the 31st of July, when a strong south-west wind set in, the *Alert* left her winter quarters.

On the 11th of August she fell in with the *Discovery*, and both ships made the best of their way southwards.

14. After many more dangers were passed the ships reached the Danish colonies of Greenland, and put on shore the dogs and the surviving interpreter. The coast of Iceland was reached on the 27th of August, 1876, and on the 2d of November the ships re-entered Portsmouth harbour.

15. Although the expedition was not able to approach within 600 miles of the North Pole, yet many scientific discoveries were made, and the question was settled of the impracticability of reaching to the Pole by the route that had been chosen.

succession, one following another.

gales, storms of wind.

interpreters, translators of a spoken language.

characteristics, special features.

boulders, large roundish stones.

drifted, floated.

imminent, threatening.

commodious, roomy.

floes, large masses of floating ice.

trended, inclined.

undulating, swelling.

amputated, cut off.

zero, the point marked with 0, above and below which temperature is measured on a thermometer.

observatories, places from which the heavenly bodies are observed.

routine, ordinary duties.

Where did the ships meet after their separation by the storm? What settlement did they soon afterwards reach, and what was taken on board? Name the most northerly settlement in the world. What interfered with the progress of the ships in Smith's Sound? Describe the appearance of the ice there. Where did the *Discovery* winter? Describe the appearance of the land after passing Robeson Channel. What prevented their progress? Where did the *Alert* anchor? In what latitude? What plants were found growing even here? By what means was the region around the ship explored? What was the temperature? How long was the sun absent? What was the ordinary routine of the men each day? How were the evenings spent? Describe the attempt made to reach the North Pole in the following spring. Why was it abandoned? How was the *Alert* freed from the ice? On what date did she rejoin the *Discovery*? When did the ships reach home? What were the results of the expedition?

THE RETROSPECT.

1. Whilst lettered travellers delight to roam
The time-worn temple and the polished dome;
Stray with the Arab o'er the wreck of time,
Where erst Palmyra's towers arose sublime;
Or mark the lazy Turk's lethargic pride,
And Grecian slavery on Ilyssus' side;
Oh! be it mine to flee from empire's strife,
And mark the changes of domestic life;
See the fallen scenes where once I bore my part,
Where every change of fortune strikes the heart.
2. Oft have my footsteps roamed the sacred spot,
Where heroes, kings, and minstrels, sleep forgot;
Oft traced the mouldering castle's ivied wall,
Or ruined convent, tottering to its fall;
Whilst sad reflection loved the solemn gloom,
Paus'd o'er the pile, and pondered on the tomb;
Yet never has my bosom felt such pain,
As when I saw my native spot again!
For every long-lost pleasure rushed to view;
For every long-past sorrow rose anew:
Where whilome all were friends, I stood alone,
Unknowing all I saw, of all I saw unknown!
3. Village, no pilgrim ever crept around
With more emotion Sion's sacred ground,
Than filled my heart, as slow I sauntered o'er
Those fields my infant steps had trod of yore;
Where I had loitered out the summer hour,
Chased the gay butterfly, and culled the flower;
Sought the swift arrow's erring course to trace,
Or with my equals vied amid the chase.

4. Cold was the morn, and bleak the wintry blast
Howled o'er the meadow, when I viewed thee last;
My bosom bounded, as I wandered round
Each well-known field, each long-remembered ground.
And as I passed along the well-trod way,
Where whilome, two by two, we walked to play,
I saw the garden-ground as usual railed—
A fence, to fetch my ball, I oft had scaled—
Oh! it recalled a thousand scenes to view,
A thousand joys, to which I long had bid adieu.
5. Silent and sad the scene! I heard no more
Mirth's honest cry, and childhood's cheerful roar;
No longer echoed round the shout of glee;
It seemed as though the world were changed, like me.
There, where my little hands were wont to rear,
With pride, the earliest salad of the year;
Where never idle weed to grow was seen;
There the rank nettle reared its head obscene.
I too have felt the hand of fate severe—
In those calm days I never knew to fear;
No future views alarmed my gloomy breast,
No anxious pangs my sickening soul possess!
No grief consumed me, for I did not know
Increase of reason was increase of woe.
6. Silent and sad awhile I paused, to gaze
On the fallen dwelling of my earlier days.
Long dwelt the eye on each remembered spot,
Each long-left scene—long left, but not forgot!
Past is the day of glory! past the day,
When here the man of learning held his sway;
No more, when howl the wintry storms around,
Within thy hall is heard the mirthful sound;
No more disport around the infant crew,

And high in health the mimic game pursue;
 No more to strike the well-aimed ball delight,
 Or rear aloft with joy the buoyant kite.

7. Seat of my earlier, happier days, farewell!
 Thy memory still within this breast shall dwell;
 Still as I journey life's rough road along,
 Or sojourn sad the college gloom among,
 Will fond remembrance paint those early days,
 When all I wished was speedy holidays!

—*Southey.*

Palmyra, a celebrated city of ancient Syria.

Ilyssus, a river running near Athens in Greece.

minstrels, wandering musicians.

convent, a house in which persons live who have retired from the world.

whilome, long ago.

pilgrim, a traveller to places of religious celebrity.

Sion, a hill in Jerusalem.

scaled, climbed.

adieu, farewell.

disport, play.

sojourn, reside for a short time.

MOZART.

1. Many of the greatest musicians have been very celebrated in their childhood for their musical talents, but none of them have excelled Johann Wolfgang Mozart. He was born in Salzburg, in January, 1756. When only three years old he listened intently to the lessons which his father, Leopold Mozart, was giving to his sister, Maria Anna, aged seven years. Mozart could then play thirds and other intervals on the harpsichord, and would smile at the beautiful sounds he produced. When he was a year older, he was taught some minuets and airs, which he learned with so much facility, that half an hour was sufficient for a minuet, and an hour for other pieces.

2. Mozart executed his pieces with the greatest precision and delicacy of touch, and his progress was so rapid, that when only five years old he composed some little pieces



in strict accordance with the rules of counterpoint, which he played before his father, who thought them worthy of being preserved. His passion for music was so great that all his amusements were connected with it. Though much petted and caressed on account of his wonderful abilities, he lost none of his child-like simplicity, but continued loving and gentle in his manners and obedient in his conduct.

3. When Mozart was six years old his father took him

and his sister to Munich, where they performed before the Elector, and soon after they went to Vienna, where the children were presented at the Imperial Court. Their travels were extended to many of the chief towns of Europe, and lastly, to Paris, where they remained a considerable time. The brother and sister performed before the royal family at Versailles, and the former played the organ in the chapel royal. They also gave two grand public concerts, which excited great astonishment and admiration. Everywhere the family was treated with the utmost respect. At Paris, Mozart composed his first two works at the age of seven years.

4. On leaving Paris, in 1764, the Mozart family came to England, and had the honour of performing before the royal family. Several concerts were given which excited great interest in the wonderful abilities of this juvenile musician. While in England, young Mozart was put to several severe tests, and the manner in which he acquitted himself was very surprising. He played very difficult pieces at first sight, in a masterly manner, and exactly as the composer intended they should be—he sang parts with the utmost correctness, which his father failed to do,—and he composed extempore music for songs on different subjects; becoming so excited with his themes that he seemed quite unable to restrain his feelings.

5. After three years of travel, Mozart returned to his home in Salzburg, where he remained a few years. At the age of twelve he went again to Vienna. He gave several exhibitions before some noblemen and gentlemen of his skill in extemporaneous composition. At the consecration of the orphan house, he arranged all the music and had the entire direction placed in his hands. After another return home, the father and son travelled into Italy, being everywhere received with respect and ad-

miration. At Rome, they attended the Sistine Chapel and heard the celebrated *Miserere*, the music of which was not allowed to be copied. Young Mozart, on his return to his lodgings, wrote it all down from memory, and took the score with him on another occasion to correct it. When this feat became known, it made so much noise that he was requested to sing it with an accompaniment on the harpsichord, at a concert at which Christophori, who had sung it in church, was present, and who by his astonishment rendered young Mozart's triumph complete.

6. At his father's death, Mozart received the appointment of concert-master to the Prince-archbishop, but after he had held it two years, he went to Vienna and was appointed chapel-master to the Emperor Joseph. His progress and fame continued to keep pace with the expectations of the public to the end of his life. Premature genius, however, seldom enjoys a long career. The health of Mozart began rapidly to decline. In the few months preceding his decease, he was unusually diligent, producing three of his best works. Mozart was exceedingly rapid in composition. On one occasion an opera which he had written, was to be performed the next evening. All the parts had been prepared and rehearsed, but the overture was not even begun. Mozart spent the preceding day in the country, and remained out late. He came home, slept for two hours, then began his work. The overture was completed before breakfast and the copyists had scarcely time to write out the score. A rehearsal was out of the question. The orchestra, however, acquitted themselves so well that it was received with thunders of applause.

7. Mozart's last work was composed when he was conscious the hand of death was upon him. A stranger

led and requested that he would compose as speedily possible, a requiem to soothe the last hours of a dying nce. He left double the price Mozart asked to insure pedition. The composer began his work, in the pro-ss of which he felt his mind unusually agitated. He played not only the day but much of the night in the aposition of it, with which he seemed to be infatuated. wrote portions of it after he was no longer able to e from his bed, and told his wife he was writing it for self. It was arranged that it should be performed in chamber, but the performance had not proceeded far, en he was so affected by it, the musicians desisted. He shed it on the day of his death, and speaking to his e, with tears in his eyes, he said, "Did I not tell you as writing this for myself?" Mozart died in his thirty- th year.

iburg, a town in Upper
ustria 156 miles w.s.w.
ienna.

psichord, a musical instru-
ent with strings of wire played
y means of keys; a kind of
d form of piano.

uets, slow dance music.

nterpoint, harmony of parts
a melody, so called because
army was formerly noted
y points.

rich, the capital of Bavaria.

saillies, near Paris.

extempore, on the spur of the
moment.

Sistine Chapel, where the car-
dinals meet in conclave to
elect a pope.

premature, very early, or before
it might be expected.

overture, the preliminary music
to an opera.

requiem, a solemn piece of music
suitable for a death-bed or a
funeral.

infatuated, uncontrolled by
reason.

t what age did Mozart show an interest in music? What were musical abilities at the age of five years? What wonderful feats he accomplish in England? Describe his great accomplishment tome. When was his requiem written? Describe some of the umstances.



FOWLING IN THE ORKNEYS.

1. Many of the islands which stud the sea around the north and west coasts of Scotland are remarkable for the stern grandeur of their precipitous cliffs. One might almost imagine that the surges of the mighty Atlantic, dashing against them for ages with unbroken fury, had undermined their solid foundations, and worn for themselves numerous passages, leaving only columnar rocks of vast height, detached from one another, though of similar formation and construction.

2. Such a rock is the Holm of Noss, apparently severed from the isle of Noss, from which it is about a hundred feet distant; but the cliffs are of stupendous height, and far below in the narrow gorge, the raging sea boils and foams, so that the beholder can scarcely look downwards without horror. But stern necessity impels men to enterprises from which the boldest would otherwise shrink. To obtain a scanty supply of coarse food for himself and family, the hardy inhabitant of the Orkneys dares even the terrors of the Holm of Noss.

3. In a small boat, with a companion or two, he seeks the base of the cliffs; and leaving them below, he fearlessly climbs the precipice, and gains the summit. A thin stratum of earth is found on the top, into which he drives some strong stakes; and having descended and performed the same operation on the opposite cliff, he stretches the rope from one to the other, and tightly fastens it. On this rope a sort of basket, called a cradle, is made to traverse, and the adventurous islander now commits himself to the frail car, and, suspended between sea and sky, hauls himself backward and forward by means of a line.

4. And do you ask what prize can tempt man to incur

such fearful hazard? It is the eggs and young of a sea-bird, the fishy taste and oily smell of whose flesh would present little gratification to any whose senses were not made obtuse by necessity. The gannets and guillemots dwell in countless myriads on these naked rocks, laying their eggs and rearing their progeny wherever the surface presents a ledge sufficiently broad to hold them. Their immense numbers render them an object of importance to the inhabitants of these barren islands, who derive from them, either in a fresh state or salted and dried, a considerable portion of their sustenance.

5. In some other situations the fowlers have recourse to a still more hazardous mode of procedure. The cliffs are sometimes twelve hundred feet in height, and fearfully overhanging. If it is determined to proceed from above, the adventurer prepares a rope, made either of straw or of hog's bristles, because these materials are less liable to be cut through by the sharp edge of the rock. Having fastened the end of the rope round his body, he is lowered down by a few comrades at the top to the depth of five or six hundred feet. He carries a large bag affixed to his waist, and a pole in his hand, and wears on his head a thick cap, as a protection against the fragments of rock which the friction of the rope perpetually loosens; large masses, however, occasionally fall and dash him to pieces.

6. Having arrived at the region of birds he proceeds with the utmost coolness and address; placing his feet against a ledge he will occasionally dart many fathoms into the air to obtain a better view of the crannies in which the birds are nestling, take in all the details at a glance, and again shoot into their haunts. He takes only the eggs and young birds, the old ones being too tough to be eaten. Caverns often occur in the perpendicular face

of the rock, which are favourite resorts of the fowls; but the only access to such situations is by disengaging himself from the rope, and either holding the end in his



hand, while he collects his booty, or fastening it round some projecting corner.

7. A story is told of an individual, who, either from choice or necessity, was accustomed to go alone on these expeditions. He supplied the wants of confederates above by firmly planting a stout iron bar in the earth, from which he lowered himself. One day having found such a cavern as is mentioned above, this fowler imprudently

disengaged the rope from his body, and entered the cave with the end of it in his hand. In the eagerness of collecting, however, he slipped his hold of the rope, which immediately swung out several yards beyond his reach.

8. The poor man was struck with horror; no soul was within hearing, nor was it possible to make his voice heard in such a position; the edge of the cliff so projected that he never could be seen from the top, even if anyone were to look for him; death seemed inevitable, and he felt the hopelessness of his situation. He remained many hours in a state bordering on stupefaction; at length he resolved to make one effort, which, if unsuccessful, must be fatal. Having commended himself to God he rushed to the margin of the cave, and, springing into the air, providentially succeeded in grasping the pendulous rope, and was saved.

9. Sometimes it is thought preferable to make the attempt from below; in this case, several approach the base in a boat; and the most dexterous, bearing a line attached to his body, essays to climb, assisted by his comrades, who push him from below with a pole. When he has gained a place where he can stand firmly, he draws up another with his rope, and then another, until all are up, except one left to manage the boat. They then proceed in exactly the same manner to gain a higher stage, the first climbing and then drawing up the others; and thus they ascend till they arrive at the level of the birds, when they collect and throw down their booty to the boat.

10. Sometimes the party remains several days on the expedition, sleeping in the crannies and caverns. This mode is attended with peculiar hazard; for, as a man often hangs suspended merely from the hands of a single comrade, it occasionally happens that the latter cannot

sustain his weight, and thus lets him fall, or is himself drawn over the rock, and shares in his companion's miserable death.—*Ocean, by Gosse.*

precipitous, steep.
holm, a small island.
gorge, gullet.
impels, urges forward.
traverse, to cross.
incur, to run into.
hazard, danger.

myriads, large numbers.
comrades, companions.
friction, effect of rubbing.
booty, gains.
stupefaction, insensibility.
pendulous, hanging.
dexterous, expert.

Give a description of the Holm of Noss. How do the inhabitants scale the rocks? Why do they run these risks? Describe the mode of getting to the nests from above. Relate the story told of the fowler who lost his hold of the rope.

LOVE OF COUNTRY AND OF HOME.

1. There is a land, of every land the pride,
Beloved by heaven o'er all the world beside;
Where brighter suns dispense serener light,
And milder moons imparadise the night:
A land of beauty, virtue, valour, truth,
Time-tutored age, and love-exalted youth.
2. The wandering mariner, whose eye explores
The wealthiest isles, the most enchanting shores,
Views not a realm so bountiful and fair,
Nor breathes the spirit of a purer air;
In every clime, the magnet of his soul,
Touched by remembrance, trembles to that pole:
3. For in this land of heaven's peculiar grace,
The heritage of nature's noblest race,
There is a spot of earth supremely blest,

A dearer, sweeter spot than all the rest,
 Where man, creation's tyrant, casts aside
 His sword and sceptre, pageantry and pride,
 While, in his softened looks, benignly blend
 The sire, the son, the husband, father, friend.

4. Here woman reigns; the mother, daughter, wife,
 Strews with fresh flowers the narrow way of life;
 In the clear heaven of her delightful eye,
 An angel-guard of loves and graces lie;
 Around her knees domestic duties meet,
 And fireside pleasures gambol at her feet.
 Where shall that land, that spot of earth be found?
 Art thou a man? a patriot? look around;
 Oh! thou shalt find, howe'er thy footsteps roam,
 That land *thy* country, and that spot *thy* home.

—James Montgomery.

dispense, distribute.
serener, clearer or more soothing.
imparadise, made very happy.
magnet, that which attracts.
heritage, inheritance.

supremely, in the highest degree.
pageantry, pompous exhibition.
benignly, graciously or kindly.
patriot, a person who loves his country and zealously defends it.

RURAL LIFE IN ENGLAND.

1. The taste of the English in the cultivation of land, and in what is called landscape gardening, is unrivalled. They have studied nature intently, and discovered an exquisite sense of her beautiful forms and harmonious combinations. Those charms, which in other countries she lavishes in wild solitudes, are here assembled round the haunts of domestic life. As a people they seem to

have caught her coy and furtive graces, and spread them like witchery about their rural abodes.

2. Nothing can be more imposing than the magnificence of English park scenery. Vast lawns that extend like sheets of vivid green, with here and there clumps of gigantic trees, heaping up rich piles of foliage; the solemn pomp of groves and woodland glades, with the deer trooping in silent herds across them; the hare bounding away to the covert; or the pheasant, suddenly bursting upon the wing; the brook, taught to wind in natural meanderings, or expand into a glassy lake; the sequestered pool, reflecting the quivering trees, with the yellow leaf sleeping on its bosom, and the trout roaming fearlessly about its limpid waters; while some rustic temple or sylvan statue, grown green and dank with age, gives an air of classic sanctity to the seclusion.

3. These are but a few of the features of park scenery; but what most delights me is the creative talent with which the English decorate the abodes of middle life. The rudest habitation, the most unpromising and scanty portion of land, in the hands of an Englishman of taste, becomes a little paradise. With a nicely discriminating eye, he seizes at once upon its capabilities, and pictures in his mind the future landscape. The sterile spot grows into loveliness under his hand; and yet the operations of art which produce the effect are scarcely to be perceived. The cherishing and training of some trees; the cautious pruning of others; the nice distribution of flowers and plants of tender and graceful foliage; the introduction of green slope of velvet turf; the partial opening to a peep of blue distance, or silver gleam of water: all these are managed with a delicate tact, a pervading yet quiet assiduity, like the magic touchings with which a painter *finishes* up a favourite picture.

4. The residence of people of fortune and refinement in the country has diffused a degree of taste and elegance in rural economy that descends to the lowest class. The very labourer, with the thatched cottage and narrow slip of ground, attends to their embellishment. The trim hedge, the grass-plot before the door, the little flower-bed bordered with snug box, the woodbine trained up against the wall, and hanging its blossoms about the lattice; the pot of flowers in the window; the holly, providentially planted about the house, to cheat winter of its dreariness, and to throw in a semblance of green summer to cheer the fireside; all these bespeak the influence of taste, flowing down from high sources, and pervading the lowest levels of the public mind.

5. In rural occupation there is nothing mean and debasing. It leads a man forth among scenes of natural grandeur and beauty; it leaves him to the workings of his own mind, operated upon by the purest and most elevating of external influences. Such a man may be simple and rough, but he cannot be vulgar.

6. The man of refinement, therefore, finds nothing revolting in an intercourse with the lower orders in rural life, as he does when he casually mingles with the lower orders of cities. He lays aside his distance and reserve, and is glad to waive the distinctions of rank, and to enter into the honest, heartfelt enjoyments of common life. Indeed, the very amusements of the country bring men more and more together. I believe this is one great reason why the nobility and gentry are more popular among the inferior orders in England than they are in any other country, and why the latter have endured so many excessive pressures and extremities without repining more generally at the unequal distribution of fortune and privilege.

7. To this mingling of cultivated and rustic society may also be attributed the rural feeling that runs through British literature; the frequent use of illustrations from rural life; those incomparable descriptions of nature that abound in the British poets, that have continued down



from "The Flower and the Leaf" of Chaucer, and have brought into our closets all the freshness and fragrance of the dewy landscape. The pastoral writers of other countries appear as if they had paid nature an occasional visit and become acquainted with her general charms; but the British poets have lived and revelled with her—they have wooed her in her most secret haunts—they have watched her minutest caprices.

2. A spray could not tremble in the breeze—a leaf

could not rustle to the ground—a diamond drop could not patter in the stream—a fragrance could not exhale from the humble violet, nor a daisy unfold its crimson tints to the morning, but it has been noticed by these impassioned and delicate observers, and wrought up into some beautiful morality.

9. The effect of this devotion of elegant minds to rural occupations has been wonderful on the face of the country. A great part of the island is rather level, and would be monotonous were it not for the charms of culture; but it is studded and gemmed, as it were, with castles and palaces, and embroidered with parks and gardens. It does not abound in grand and sublime prospects, but rather in little home scenes of rural repose and sheltered quiet. Every antique farm-house and moss-grown cottage is a picture; and as the roads are continually winding, and the view is shut in by groves and hedges, the eye is delighted by a continual succession of small landscapes of captivating loveliness.

10. The great charm, however, of English scenery is the moral feeling that seems to pervade it. It is associated in the mind with ideas of order, of quiet, of sober well-established principles, of hoary usage and reverend custom. Everything seems to be the growth of ages of regular and peaceful existence.

11. The old church of remote architecture, with its low, massive portal, its Gothic tower, its windows rich with tracery and painted glass, in scrupulous preservation; its stately monuments of warriors and worthies of the olden time, ancestors of the present lords of the soil; its tombstones, recording successive generations of sturdy yeomanry, whose progeny still plough the same fields, and kneel at the same altar—the parsonage, a quaint, irregular pile, partly antiquated, but repaired and altered in the tastes

of various ages and occupants—the stile and footpath leading from the churchyard, across pleasant fields and along shady hedgerows, according to an immemorial right of way—the neighbouring village, with its venerable cottages, its public green sheltered by trees, under which the forefathers of the present race have sported—the antique family mansion, standing apart in some little rural domain, but looking down with a protecting air on the surrounding scene; all these common features of English landscape evince a calm and settled security, and hereditary transmission of home-bred virtues and local attachments, that speak deeply and touchingly for the moral character of the nation.—*Washington Irving.*

cultivation, tillage.
 exquisite, refined or matchless.
 harmonious, suitable.
 lavishes, gives bountifully
 coy, shy, modest.
 haunts, resorts.
 furtive, stolen.
 witchery, enchantment.
 magnificence, splendour.
 foliage, leaves of trees.
 glades, lanes through the woods.
 meanderings, windings.
 expand, spread out.
 sequestered, retired.
 quivering, shaking.
 limpid, clear.
 decorate, adorn.
 discriminating, distinguishing.
 capabilities, qualifications.

sterile, barren.
 assiduity, diligence.
 diffused, spread.
 embellishment, adornment.
 semblance, likeness.
 debasing, degrading.
 casually, occasionally.
 waive, put aside.
 literature, writings of the best
 English authors.
 caprices, whims, fancies.
 monotonous, wanting in variety.
 embroidered, fringed.
 antique, old looking.
 hoary, white with age.
 architecture, style of building.
 portal, doorway.
 progeny, descendants.
 evince, show.

Name something for which the English are noted. Describe some of the beauties of their park scenery. What else are the English noted for? How has this love of rural life spread amongst the lower classes? What trees does the labourer plant about his cottage? What writers are fond of describing rural scenes? Name some subjects that they are fond of describing. What is the great charm of English scenery? What is this moral feeling associated with?

THE GENTLEMAN.

1. Not alone by generous birth
 (Greatly though it fashions men),
Not by all the wealth of earth,
 Not by all the talents ten,
Not by beauty, nor by wit,
 No, nor manners well refined,—
Is that name of honour writ
 On the forehead of the mind.
2. Poverty retains it oft,
 With the peasant it hath dwelt,
And its influence sweet and soft
 In the scholarless been felt;
Lowly birth, and sorrow's power,
 All that want of all things can,
Have not marr'd—nor made—one hour
 That true Knight, the Gentleman.
3. Charity,—unselfish zeal
 Lest a sorrow or a shame
Anyone be made to feel
 Undeserving scorn or blame,—
Dignity,—the generous sense
 That himself is heir outright
To that heritage immense,
 King and priest of worlds of light,—
4. Lowliness of heart withal,—
 Purity of word and life,—
Courage—not for arms to call,
 But to quell insurgent strife,—
Honour, for the good and true,
 With Bayard to guard the van,—
And what courtesies are due,
 These make up the Gentleman.

5. Ay, sir, calm and cold and proud,
 Trust me, for the word is true,
 There are thousands in the crowd
 Finer gentlemen than you;
 More,—for all your courtly birth
 And each boon by fortune given,
 Know that gentlemen of earth
 Are always gentle sons of heaven.

6. Chesterfields, and modes and rules
 For polish'd age or stilted youth,
 And high breeding's choicest schools
 Need to learn this deeper truth,
 That to act, whate'er betide,
 Nobly on the Christian plan,
 This is still the surest guide
 How to be the Gentleman.

—*M. F. Tupper, Lyrics of the Heart and Mind.*

marr'd, spoilt.

knight, a model gentleman of
 the olden time.

heritage, inheritance.

Bayard, a noble and gallant
 Frenchman, highly distin-
 guished for his bravery and

his honourable character. Died
 1524.

Chesterfields. The Earl of Ches-
 terfield wrote a famous series
 of letters to teach his son good
 manners. He died 1773.
betide, happen.

LINNÆUS, THE SWEDISH BOTANIST.

PART I.

1. There are many beautiful spots in Sweden, and
 Rashult, in the province of Smaland, where Charles
 Linnæus was born, in the year 1707, is said to be
 delightfully situated near the banks of a fine lake, sur-
 rounded by hills and valleys, woods and cultivated
ground. From a very early age Linnæus was remark-

able for his love of plants, and as he tells us himself, was no sooner out of his cradle, than he almost lived in his father's garden. He was scarcely four years old when he heard his father, who was the village clergyman, explaining to a few friends the qualities of some particular plants; this first botanical lecture was remembered by him as an epoch in his scientific life. When he was eight years old his father gave him a plot of ground for a garden; he made many excursions to the woods and meadows to find plants and flowers to put in it, and never ceased to inquire of his father the names and properties of all the plants of the garden and field that he could procure.

2. At school, Charles showed a decided preference for natural history, and disappointed his father by his want of taste for other branches of learning. He took long rambles in the fields, and his father considered this as an indication of an idle and thoughtless disposition. Charles Linnæus was unfortunate in his instructors. His first tutor was a person of disagreeable manners; then at the grammar-school of Wexio, he met with a harsh taskmaster. When he was seventeen he was removed to a higher grade school, and it was intended that he should enter the church. But he had no taste for the studies required in that profession, though he made great progress in mathematics, natural philosophy, and his favourite study—botany. His literary progress was so small that when in 1724 his father went to see him, his tutors said he was a hopeless dunce, and advised that he should be put apprentice to a shoemaker, tailor, or other tradesman, and not forced to pursue an object for which he was evidently unfit.

3. Fortunately, Dr. Rothman, the lecturer on natural philosophy, had more discernment, and encouraged Charles's

father to allow his son to study medicine, offering to take the young man into his own house for a year, an offer which was gladly accepted. He next studied at the University of Lund, and made so much progress that he occasionally assisted Dr. Stobœus, a physician with whom he lived, in the labours of his profession, and soon became a great favourite.

4. When he was spending a summer vacation at home, he met his old patron, Dr. Rothman, and was advised by him to study at Upsal, as he would there derive superior advantages both in medicine and botany. Here the vigour of his mind first clearly showed itself. But he had to struggle against many difficulties. All his father could allow him was eight pounds a year, so he was often in want of books, and clothes, and even bread. He was reduced to mending his own boots with the bark of trees and folded paper. Happily for Linnæus his industry and love of knowledge came under the favourable notice of Dr. Olaus Celsius, the professor of divinity, who was very fond of the study of plants; and finding that he was much in want of assistance, Dr. Celsius generously invited him into his own house.

5. During his stay in the house of Dr. Celsius, Linnæus wrote his first essay on the classification of plants on a new system of his own. This led to his being appointed an assistant lecturer in the botanic garden in 1730. He had previously solicited the humble appointment of gardener to the university, but was refused on the ground of his being fit for a better situation. Now, finding himself authorized to take the direction of the garden, he reformed and greatly enriched it. He entered the house of Professor Rudbeck, the senior lecturer on botany, as tutor to his children, and by this means obtained the use of a very fine collection of books and drawings. His

mornings were devoted to the duties of his situation, and his evenings to his botanical studies.

6. A new object soon engaged the attention of our young naturalist. Hearing Professor Rudbeck speak of the curiosities he had seen in Lapland, Linnæus felt a



Interior of Fisherman's Cottage, Lapland.

great desire to visit that country, and as the Academy of Sciences at Upsal wished to send a traveller into those remote and desolate regions, Linnæus received an appointment to travel through Lapland, under the royal authority and at the expense of the academy. In May, 1732, he set off on his long journey, travelling sometimes on horseback, sometimes on foot, carrying all his luggage on his back. He met with great hardships in traversing the barren provinces of Lapland; bogs and forests con-

tinually intercepted his way; he frequently was forced to cross rivers, and was often at a loss to find a roof to shelter himself, or even to obtain the coarsest kind of food. Nothing, however, escaped his notice; and poor and barren as was much of the country through which he travelled, he brought from it more than a hundred plants previously unknown in Sweden, and was able, on his return, to describe the face of the country, the animals, the manners and customs of the inhabitants, and much that was curious and interesting.

7. During this journey he had an opportunity of benefiting the Laplanders by his knowledge of plants. At Tornea, a city on the north of the Gulf of Bothnia, he was told that very many of the cattle, which had been turned out to grass, had died of a violent disease. Linnaeus examined the marsh in which the cattle had fed, and found that it contained abundance of water-hemlock, which is one of the most poisonous of plants. He returned to Upsal the following October, having, in five months, performed a journey of nearly four thousand miles. The academy could only allow him his expenses—amounting to ten pounds; such was the poverty of Sweden at this time. His services, however, were recognized by his being elected a member of the academy.

botanical, relating to plants.

epoch, a date made remarkable by some event.

mathematics, the science of number and quantity.

university, a place of learning having the privilege of conferring degrees.

classification, putting into classes or sorting.

Describe the birthplace of Linnaeus. How was his interest first excited in plants? Who gave him most useful advice as to his studies? Describe his difficulties at the university. What was the subject of his first essay? Describe the first public appointment he received. From whom did Linnaeus receive an appointment to travel through Lapland? Name some of the hardships he had to undergo in fulfilling it. What benefit was he enabled to confer on the people of Tornea?

LINNÆUS, THE SWEDISH BOTANIST.

PART II.

1. The next noteworthy event in the life of this great man is his attempt to become a lecturer in the university. Knowing something of the art of assaying metals he began to lecture on mineralogy. The jealousy of a Dr. Rosen was excited, and he declared that there was a law to prevent anyone who had not taken his degree from lecturing. By his influence with the authorities the lectures of Linnæus were stopped, and he was thus deprived of his only means of subsistence. He was very angry with Dr. Rosen, and for a time nourished very revengeful feelings against him, but in after years they became firm friends, and very useful to each other. Linnæus, with some pupils, departed on a scientific excursion into the province of Dalecarlia. At Fahlun, the capital, he gave a course of lectures. He was now advised to take his doctor's degree, in order to pursue the practice of physic. He set out to find a cheap university, having only fifteen pounds in his pockets. In his travels he arrived at Hamburg, and there exposed a deception which was being practised in the exhibition of a made-up animal as a real creature; but the indignation excited against him for his honesty in exposing the imposture was so great, that he had to leave the city secretly. He went to Harderwyk, in Holland, and there was admitted to the degree of Doctor of Medicine.

2. Linnæus eventually settled at Amsterdam, being engaged by Mr. Clifford, a rich magistrate, to live with him as his physician and botanist. Holland, though a flat and uninteresting country, has for ages been famous for the beauty of the flowers cultivated in its gardens

Mr. Clifft had beautiful pleasure-grounds, and Linnæus greatly enjoyed them. He visited England, Mr. Clifft paying his expenses, that he might see the nurseries near London, into which North American plants had lately been introduced. It is said he was so much delighted with the golden bloom of the furze growing on Putney Heath, that he fell on his knees in rapture at the sight. He always admired it, and tried in vain to preserve it through a Swedish winter in his greenhouse.

3. In the year 1741 Linnæus became a professor of the University of Upsal, the place which he had formerly entered in such poverty. He found that the botanic garden, once so celebrated, had fallen into sad neglect, and he used all possible exertion to re-establish and improve it. A house was built for him close to the garden, which was now enriched with presents from every collection in Europe, and Linnæus was delighted to procure all the plants of Sweden and Norway. "Formerly," said he, writing to a friend, "I had plants and no money, and now I should not enjoy my money if I had not plants." He was now much employed as a teacher, lecturing in all departments of natural history and on medicine. Students flocked to hear him from all parts of Europe, and sometimes even from America.

4. In the summer he sometimes made country excursions at the head of two hundred pupils; many foreigners and other persons of distinction often joined him. They set out in small parties to explore the country, and whenever any rare plant or natural curiosity was discovered, a horn was blown and the whole party assembled round their chief to hear his explanation and remarks. There was a rule in Sweden at that time that all young clergymen should learn something of botany and medicine, in order *that they might be of service in cases of sickness among*



the country people, and this regulation increased the number of his pupils.

5. Linnæus loved his garden better than any other place; he was continually making some fresh discovery among his flowers. The seed of a kind of bird's foot trefoil had been sent to him from the south of France, and he had watched two flowers on a plant raised from this seed. Going one evening into the garden he looked for these flowers in vain. The next morning they were there as before, and the gardener thought they must be fresh flowers, as they had not been discovered in the evening. Linnæus went again in the dark hour, and

searching more diligently than before, he at last found these flowers closely folded up, and their leaves contracted over them. Linnæus might now be seen going about his gardens and hothouses with a lantern in his hand, and from finding so many flowers concealed amidst their leaves, he took the idea of the *sleep of plants*. He formed a kind of dial, on which the hours of the day were marked, by the different times at which certain flowers were found to open or close their blossoms; and he formed a rural calendar, marking the proper times for the different labours of husbandry by the appearance of the blossoms of plants. Mrs. Hemans has said in one of her poems:—

“’Twas a lovely thought to mark the hours
As they floated in light away,
By the opening and the folding flowers
That laugh to the summer’s day.”

6. Linnæus held his professorship thirty-seven years, and about the close of this period he published his great book, containing a description of all known plants, arranged on the sexual system, for which he became so famous. The same year in which this work appeared, he was created a Knight of the Polar Star, an honour never before bestowed on a man of science or letters; and about seven years afterwards, he was elevated to the rank of nobility. He lived in easy affluence and in the enjoyment of his dignities, till January, 1778, when he was removed by an attack of apoplexy.

7. His remains were deposited in a vault near the west end of the Cathedral at Upsal, where a monument of Swedish porphyry was erected by his pupils. He was honoured with a public funeral, at which were present the members of the university, the pall being sup-

ported by sixteen doctors of physic, all of whom had been his pupils. A general mourning took place on the occasion at Upsal, and King Gustavus III. not only caused a medal to be struck expressive of the public loss, but introduced the subject in a speech from the throne, regarding the death of Linnæus as a national calamity.

s. Linnæus had been hasty and impetuous in his youth, but in advanced life he became mild and temperate, and was always ready to do justice to the merits of others. He frequently declared that the works of nature best teach the existence of a God, and often spoke in glowing words of the greatness and omnipotence of the Almighty.

assaying, proving the purity of metals.

mineralogy, the science which treats of the properties of mineral substances.

nurseries, gardens where plants are grown for sale.

calendar, an almanac.

husbandry, farming operations.

porphyry, a very hard stone partaking of the nature of granite and susceptible of a fine polish.

impetuous, rash.

omnipotence, having all power.

How did Linnæus now attempt to earn a livelihood? Describe his travels on leaving Upsal. What situation did he obtain at Amsterdam? Mention some particulars of his journey to England. What was his chief work on settling again at Upsal? Describe one of his summer excursions. How did he discover that plants went to sleep? What honours were conferred upon him?

PERSIA.

1. Persia is a large country in Asia, lying between the Caspian Sea and the Persian Gulf. In ancient times Persia formed one of the provinces of the Assyrian Empire, on the disruption of which, it fell under the power of the Medes. Cyrus, one of its rulers, in the year

560 B.C., succeeded in establishing its independence, and afterwards consolidated it into a powerful kingdom.

2. During the reigns of several succeeding kings the Persians gradually increased in wealth and power; and conquering most of the surrounding nations, established a vast empire extending from Greece to the river Indus. This empire was afterwards broken up by Alexander the Great, King of Macedonia, who completely destroyed the Persian army under Darius the king in three great battles.

3. Since the break-up of the Persian Empire, Persia has fallen successively under the dominion of the Romans, Arabs, and Tartars, but it is at the present time an independent kingdom governed by a native ruler who is called the Shah.

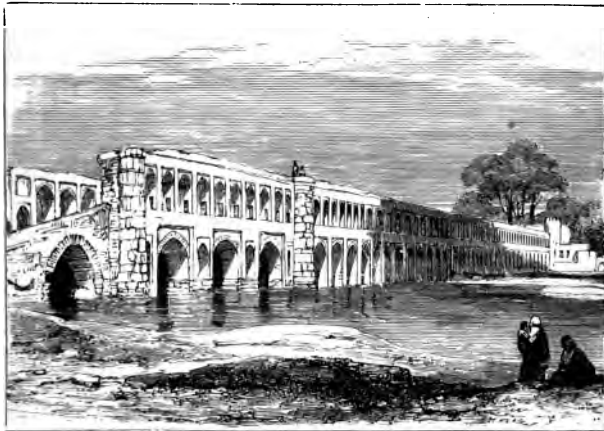
4. Persia is more than twice as large as France, but a great part of it is incapable of cultivation, as it consists of high barren plateaus or table-lands. In addition to these, in the eastern parts of the country, there are great treeless sandy wastes or deserts, without a particle of vegetation, excepting in the narrow valleys which form the course of the few rivers that are found there.

5. In many districts of Persia the soil is largely impregnated with salt, indeed the numerous salt deserts and salt lakes form the chief peculiarities of the country.

6. Every variety of climate is found in Persia, from the intense cold of the snow-clad mountain districts, to the almost torrid heat of the plains. Agriculture is the chief occupation of the people and is well understood, especially the art of cultivation by artificial irrigation of the land.

7. There is a celebrated bridge at Ispahan, the former capital of Persia. This bridge has thirty-three arches, and on either side instead of a parapet a gallery extends from end to end composed of seventy smaller arches.

Aqueducts are numerous, and some of these are of very great length. By means of them large tracts of country, that would otherwise be barren, are irrigated, and so brought under cultivation. Rice, wheat, and barley are the usual crops; but millet, maize, beans, and peas



Julfa Bridge, Isfahan.

are grown in great quantities. Cotton, indigo, sugar, and tobacco are also cultivated, and near some of the towns large tracts of land are entirely set apart for the cultivation of roses and other perfume-yielding flowers.

8. Fruits are grown in abundance and are excellent in quality. The domestic animals of Persia are camels, horses, mules, buffaloes, sheep, and goats. The Persian horses are noted for their beauty, strength, and speed, especially those belonging to some of the nomadic tribes that live on the borders of the deserts. Mules are used more than any other animals for the transport of goods.

9. Wild animals are numerous in some parts. The chief are lions, leopards, bears, wolves, and wild boars. The sturgeon is caught in the Caspian Sea, and also in the Persian Gulf. Birds are plentiful, and include pheasants, nightingales, and bustards.

10. The artisan population of the towns are skilful and industrious, and exhibit exquisite taste in their productions. Persian rugs and carpets are beautiful in colour, rich in design, and of almost endless wear. Shawls and embroidered work are very highly prized and much sought after. They are mostly made from the long silky hair of the native goat interwoven with threads of gold and silver.

11. The Persians are also celebrated for their inlaid and damascened ware, which is brought to great perfection in the production of jewelry and swords. This trade is usually carried on in the bazaars of the large towns.

12. There is still living in Persia a singular race of people called the Parsees or fire-worshippers. They adore fire, light, and the sun, as the emblem of the Deity. This worship is supposed to have been the early faith of the country.

13. The people of Persia are badly governed, and are very heavily taxed. There are but few good roads in the country, and these are infested with robbers. Shiraz, a town near the Persian Gulf, is noted as the residence and burial-place of two great Persian poets—Hafiz and Saadi.

Assyrian Empire, one of the most ancient empires. **disruption**, breaking up.

Medes, a nation that inhabited the country of Media, which was situated to the south-west of the Caspian Sea.

Cyrus, a Persian king, the founder of the Persian Empire. He defeated the Medes. He also fought against the Assyrians and took Babylon by turning the course of the river Euphrates. He died 529 B.C.

consolidated, made firm.

Alexander the Great was the King of Macedon, one of the provinces of Greece. He conquered all the countries from Greece to India. The city of Alexandria in Egypt was founded by him. Alexander died 323 B.C.

Darius III., the last Persian Emperor, died 330 B.C.

Romans, one of the four great nations of antiquity.

Arabs, an eastern nation that came from Arabia.

incapable, unfit.

plateaus, elevated plains.

Tartars, an eastern nation that came from Tartary in Central Asia.

impregnated, charged with.

peculiarities, special features.

irrigation, watering by means of channels or canals.

nomadic, wandering.

exquisite, refined, matchless.

embroidered, ornamental needle-work.

damascened, inlaid metal work, so called from Damascus where it was first worked.

bazaars, eastern markets.

emblem, sign.

infested, annoyed.

Where is Persia situated? Who was its first great king? What nations did he conquer? Who was its last ruler? By whom was he conquered? By what nations has it been conquered since? Describe the appearance of some large districts in Persia. What is found in great quantities in the soil? What is the chief occupation of the people? What are the chief objects of culture? Name the domestic animals. Name the wild animals. For what are the Persians noted?

THE FIRE-WORSHIPPERS.

And who is he, that wields the might
 Of Freedom on the Green Sea brink,
 Before whose sabre's dazzling light
 The eyes of Yemen's warriors wink?
 Who comes, embower'd in the spears
 Of Kerman's hardy mountaineers?—
 Those mountaineers that truest, last,
 Cling to their country's ancient rites,
 As if that God, whose eyelids cast



Their closing gleam on Iran's heights,
Among her snowy mountains threw
The last light of his worship too!

'Tis Hafed—name of fear, whose sound
Chills like the muttering of a charm!--
Shout but that awful name around,
And palsy shakes the manliest arm.

'Tis Hafed, most accurs'd and dire
(So rank'd by Moslem hate and ire)
Of all the rebel Sons of Fire;
Of whose malign, tremendous power
The Arabs, at their mid-watch hour,
Such tales of fearful wonder tell,
That each affrighted sentinel
Pulls down his cowl upon his eyes,
Lest Hafed in the midst should rise!
A man, they say, of monstrous birth,
A mingled race of flame and earth,
Sprung from those old, enchanted kings,

Who in their fairy helms, of yore
A feather from the mystic wings
Of the Simoorgh resistless wore;
And gifted by the Fiends of Fire,
Who groan'd to see their shrines expire,
With charms that, all in vain withstood,
Would drown the Koran's light in blood!

Such were the tales that won belief,
And such the colouring Fancy gave
To a young, warm, and dauntless Chief,—
One who, no more than mortal brave,
Fought for the land his soul ador'd,
For happy homes and altars free,—
His only talisman, the sword,
His only spell-word, Liberty!
One of that ancient hero line,
Along whose glorious current shine
Names that have sanctified their blood;
As Lebanon's small mountain-flood
Is render'd holy by the ranks
Of sainted cedars on its banks.
'Twas not for him to crouch the knee
Tamely to Moslem tyranny;
'Twas not for him, whose soul was cast
In the bright mould of ages past,
Whose melancholy spirit, fed
With all the glories of the dead,
Though fram'd for Iran's happiest years,
Was born among her chains and tears!—
'Twas not for him to swell the crowd
Of slavish heads, that shrinking bow'd
Before the Moslem, as he pass'd,
Like shrubs beneath the poison-blast—

No—far he fled—indignant fled
The pageant of his country's shame;
While every tear her children shed
Fell on his soul like drops of flame;
And, as a lover hails the dawn
Of a first smile, so welcom'd he
The sparkle of the first sword drawn
For vengeance and for liberty!

But vain was valour—vain the flower
Of Kerman, in that deathful hour,
Against Al Hassan's whelming power,—
In vain they met him, helm to helm,
Upon the threshold of that realm
He came in bigot pomp to sway,
And with their corpses block'd his way—
In vain—for every lance they rais'd,
Thousands around the conqueror blaz'd;
For every arm that lin'd their shore,
Myriads of slaves were wafted o'er,—
A bloody, bold, and countless crowd,
Before whose swarm as fast they bow'd
As dates beneath the locust cloud.

There stood—but one short league away
From old Harmoia's sultry bay—
A rocky mountain, o'er the Sea
Of Oman beetling awfully;
A last and solitary link

Of those stupendous chains that reach
From the broad Caspian's reedy brink
Down winding to the Green Sea beach.
Around its base the bare rocks stood,
Like naked giants, in the flood,

As if to guard the Gulf across;
While, on its peak, that brav'd the sky,
A ruin'd Temple tower'd, so high
That oft the sleeping albatross
Struck the wild ruins with her wing,
And from her cloud-rock'd slumbering
Started—to find man's dwelling there
In her own silent fields of air!
Beneath, terrific caverns gave
Dark welcome to each stormy wave
That dash'd, like midnight revellers, in;—
And such the strange, mysterious din
At times throughout those caverns roll'd,—
And such the fearful wonders told
Of restless sprites imprison'd there,
That bold were Moslem, who would dare,
At twilight hour, to steer his skiff
Beneath the Gheber's lonely cliff.

On the land side, those towers sublime,
That seem'd above the grasp of Time,
Were sever'd from the haunts of men
By a wide, deep, and wizard glen,
So fathomless, so full of gloom,

No eye could pierce the void between:
It seem'd a place where gholes might come
With their foul banquets from the tomb,

And in its caverns feed unseen.
Like distant thunder, from below,

The sound of many torrents came,
Too deep for eye or ear to know
If 'twere the sea's imprison'd flow,
Or floods of ever-restless flame.
For, each ravine, each rocky spire

Of that vast mountain stood on fire;
And, though for ever past the days
When God was worshipp'd in the blaze
That from its lofty altar shone,—
Though fled the priests, the votaries gone,
Still did the mighty flame burn on,
Through chance and change, through good and ill,
Like its own God's eternal will,
Deep, constant, bright, unquenchable!



Thither the vanquish'd Hafed led
His little army's last remains;—
"Welcome, terrific glen!" he said,
"Thy gloom, that Eblis' self might dread,

Is heav'n to him who flies from chains!"
 O'er a dark, narrow bridge-way known
 To him and to his Chiefs alone,
 They cross'd the chasm and gain'd the towers,—
 "This home," he cried, "at least is ours;—
 Here we may bleed, unmock'd by hymns
 Of Moslem triumph o'er our head;
 Here we may fall, nor leave our limbs
 To quiver to the Moslem's tread.
 Stretch'd on this rock, while vultures' beaks
 Are whetted on our yet warm cheeks,
 Here—happy that no tyrant's eye
 Gloats on our torments—we may die!

This spot, at least, no foot of slave
 Or satrap ever yet profaned;
 And though but few—though fast the wave
 Of life is ebbing from our veins,
 Enough for vengeance still remains.
 As panthers, after set of sun,
 Rush from the roots of Lebanon
 Across the dark-sea robber's way,
 We'll bound upon our startled prey;
 And when some hearts that proudest swell
 Have felt our falchion's last farewell;
 When Hope's expiring throb is o'er,
 And ev'n Despair can prompt no more,
 This spot shall be the sacred grave
 Of the last few who, vainly brave,
 Die for the land they cannot save!"—*Moore.*

een Sea, Persian Gulf.
 men, Arabia Felix.

rman, a province of Persia lying
 on the Persian Gulf.

an, true general name for the
 empire of Persia.

(7)

Moslem, belonging to the Ma-
 hommedans.

ire, wrath, anger.

malign, malicious, bad.

cowl, hood or cap.

Simoorgh, the griffin Simoorgh.

M

- it is said, took some feathers from her breast for Tahmuras (an ancient King of Persia), with which he adorned his helmet, and transmitted them afterwards to his descendants.
- Koran**, the book written by Mahommed, as he and his followers assert by inspiration.
- talisman**, charm or spell.
- pageant**, spectacle.
- Al Hassan**, the Emir, a title of dignity among the Turks denoting chief or lord.
- Harmozia**, the present Gombaron, a town on the Persian side of the gulf.
- Oman**, one of the five divisions of Arabia, on the Persian Gulf.
- beetling**, jutting.
- Caspian**, a large lake on the north of Persia.
- albatross**, the largest known sea-bird. According to fable it sleeps in the air when on the wing.
- Gheber**, fire-worshipper.
- gholes**, demons that feed on the dead.
- ravine**, a long deep hollow formed by a mountain torrent.
- stood on fire**, the Ghebers generally built their temples over subterranean fires.
- votaries**, those devoted by a vow to the service of the temple.
- burn on**, the Ghebers assert that the sacred fire in the temple at Yezd, a city of Persia, has continued to burn since the days of Zoroaster.
- Eblis**, Lucifer, Satan.
- vulture**, a large rapacious bird which feeds on carrion.
- whetted**, sharpened.
- gloats**, gazes with burning passion.
- satrap**, a Persian viceroy or ruler.
- panther**, a ferocious animal having a spotted skin, found in Asia and Africa.
- falchion**, a short crooked sword.

THE BATTLE OF NIEVELLE.

WELLINGTON'S ENTRY INTO FRANCE THROUGH THE PYRENEES.

1. Day broke with great splendour; and as the first ray of light played on the summit of the lofty Pyrenees, the signal guns were fired in rapid succession. Then the British leaped up, and the French, beholding with astonishment their columns rushing forward, ran to their defences with much tumult. They opened a few pieces which were answered from the top of the greater Rhune by the mountain artillery, and at the same moment two companies of the 43rd were detached to cross the marsh,

if possible, and keep down the fire from the lower part of the hog's back; the remainder of the regiment, partly in line, partly in column of reserve, advanced against the high rocks.

2. From these crags the French shot fast, but the quick even movement of the British line deceived their aim; and the soldiers running forward very swiftly, though the ground was rough, turned suddenly between the rocks and the marsh, and were immediately joined by the two companies which had passed that obstacle notwithstanding its depth. Then all together jumped into the lower works: but the men exhausted by their exertions, for they had passed over half a mile of very difficult ground with a wonderful speed, remained for a few minutes inactive within half pistol shot of the first stone castle, from whence came a sharp and biting musketry.

3. When they recovered breath they arose, and with a stern shout commenced the assault. The French, as numerous as their assailants, had for six weeks been labouring on their well-contrived castles; but strong and valiant in arms must the soldiers have been who stood in that hour before the veterans of the 43rd. One French grenadier officer only dared to sustain the rush. Standing alone on the high wall of the first castle, and flinging large stones with both his hands, a noble figure, he fought to the last and fell, while his men, shrinking on each side, sought safety among the rocks on his flanks.

4. Close and confused was then the action, man met man at every turn, but with a rattling musketry, sometimes struggling in the intricate narrow paths, sometimes climbing the loose stone walls, the British soldiers won their desperate way, until they had carried the second castle, called by the French the place of arms and the magpie's nest, because of a lofty pillar of rock which rose

above it, and on which a few marksmen were perched. From these points the defenders were driven into their last castle, which, being higher and larger than the others, and covered by a natural ditch or cleft in the rocks fifteen feet deep, was called the Donjon.

5. There they made a stand, and the assailants, having advanced so far as to look into the rear of the rampart and star-fort on the table-land below, suspended the vehement throng of their attack for a while; partly to gather head for storming the Donjon, partly to fire on the enemy beneath them who were now warmly engaged with two battalions of Portuguese riflemen. These last were to have followed the 43rd, but seeing how rapidly and surely the latter were carrying the rocks, they had moved at once against the traverse on the other side of the marsh; and very soon the French defending the rampart being thus pressed in front, and warned by the direction of the fire that they were turned on the ridge above, seeing also the 52nd forming the extreme left of the division now emerging from the deep ravine beyond the star-fort on the other flank, abandoned their works. Then the 43rd, gathering a strong head, stormed the Donjon; some leaped with a shout down the deep cleft in the rock, others turned it by the narrow paths on each flank, and the enemy abandoned the loose walls at the moment they were being scaled; thus in twenty minutes 800 old soldiers were hustled out of this labyrinth—yet not so easily, but the victors lost 11 officers and 67 men.

6. All the mountain was now cleared of the French, for the riflemen dropped perpendicularly from the greater Rhune upon the post of crags in the hollow and seized it with small loss; but they were ill-seconded by Giron's *Andalusians*, and hardly handled by the 34th French

regiment, which obstinately clung to the slope and covered the flight of the confused crowd rushing down the mountain behind them towards the connecting neck of land; at that point also all rallied and seemed inclined to renew the action, yet after some hesitation continued their retreat. This favourable moment for a decisive stroke had been looked for by the commander of the 43rd, but the officer intrusted with the reserve companies of the regiment had thrown them needlessly into the fight, thus rendering it impossible to collect a body strong enough to assail such a heavy mass.

7. The contest at the stone wall and star-fort, shortened by the rapid success on the hog's back, had not been very severe. Kempt, however, always conspicuous for his valour, was severely wounded; nevertheless he did not quit the field, and soon reformed his brigade on the platform he had thus so gallantly won. The 52nd, having turned the position by the ravine, was now approaching the enemy's line of retreat; but Alten, following his instructions, halted the division partly in the ravine itself to the left of the neck, partly on the table-land.

8. The signal guns from the Atchubia, which sent the light division against the Rhune, had also put the fourth and seventh divisions in movement against the redoubts of San Barbe and Grenada, and eighteen guns were instantly placed in battery against the former. While they poured their stream of shot, the troops advanced with scaling ladders, and the skirmishers of the fourth division soon got into the rear of the work; whereupon the French leaped out and fled, and Ross's battery of horse artillery, galloping to a rising ground in rear of the Grenada Fort, drove them from there also; then the divisions carried the village of Sarre and the position beyond it, and advanced to the attack of Clausel's main position.

1

9. It was now eight o'clock, and from the smaller Rhune a splendid spectacle of war opened upon the view. On the left the ships of war, slowly sailing to and fro, were exchanging shots with the fort of Socoa; and Hope, menacing all the French lines in the low ground, sent the sound of a hundred pieces of artillery bellowing up the rocks, to be answered by nearly as many from the tops of the mountains. On the right the summit of the great Atchubia was just lighted by the rising sun, and 50,000 men, rushing down its enormous slopes with ringing shouts, seem to chase the receding shadows into the deep valley. The plains of France, so long overlooked from the towering crags of the Pyrenees, were to be the prize of battle, and the half-famished soldiers in their fury broke through the iron barrier erected by Soult as if it were but a screen of reeds.—*Sir W. Napier.*

Nievelle, the name of a small river to the south of Bayonne, in S.W. corner of France. It was here that Marshal Soult, one of Napoleon I.'s bravest generals, determined to oppose the entry of Wellington into France through the Pyrenees. He spent some months in the construction of fortifications along the river and on the neighbouring heights, which were spurs from the Pyrenees.

Rhune and Atchubia, names of summits to offshoots from the Pyrenees.

artillery, cannon.

hog's back, ridge of the mountain.

exhausted, tired out.

assault, attack.

assailants, those attacking.

veterans, old soldiers.

rampart, fortification.

traverse, protected way.

labyrinth, winding way.

conspicuous, noted, distinguished.

brigade, a division of soldiers.

redoubts, small forts.

Sir W. Napier, who wrote this graphic account of the commencement of the battle, was a commander under Wellington, and also the historian of the Peninsular War. The battle was fought Nov. 10, 1813.

Where is Nievelle? Who commanded the battle on the British side? Who on the French? Describe the commencement of the battle. What regiment led the attack? In what part of the fortification did the French make a stand? What general displayed great bravery though wounded? How many men attacked from the *British side*? What was the prize of the battle?

PEACE AND WAR.

How beautiful this night! the balmiest sigh,
Which vernal zephyrs breathe in evening's ear,
Were discord to the speaking quietude
That wraps this moveless scene. Heaven's ebon vault,
Studded with stars unutterably bright,
Through which the moon's unclouded grandeur rolls,
Seems like a canopy which Love has spread
To curtain her sleeping world. Yon gentle hills,
Robed in a garment of untrodden snow;
Yon darksome rocks, whence icicles depend,
So stainless, that their white and glittering spires
Tinge not the moon's pure beam; yon castled steep,
Whose banner hangeth o'er the time-worn tower
So idly, that rapt fancy deemeth it
A metaphor of peace;—all form a scene
Where musing solitude might love to lift
Her soul above this sphere of earthliness;
Where silence undisturbed might watch alone,
So cold, so bright, so still.—

Ah! whence yon glare
That fires the arch of heaven?—That dark red smoke
Blotting the silver moon? The stars are quenched
In darkness, and the pure and spangling snow
Gleams faintly through the gloom that gathers round!
Hark to that roar, whose swift and deafening peals
In countless echoes through the mountains ring,
Startling pale Midnight on her starry throne!
Now swells the intermingling din; the jar,
Frequent and frightful, of the bursting bomb;
The falling beam, the shriek, the groan, the shout,
The ceaseless clangour, and the rush of men
Inebriate with rage:—loud and more loud

The discord grows; till pale death shuts the scene,
And o'er the conqueror and the conquered draws
His cold and bloody shroud.—Of all the men



Whom day's departing beam saw blooming there,
In proud and vigorous health; of all the hearts
That beat with anxious life at sunset there;
How few survive, how few are beating now!
All is deep silence, like the fearful calm
That slumbers in the storm's portentous pause;
Save when the frantic wail of widow'd love
Comes shuddering on the blast, or the faint moan,
With which some soul bursts from the frame of clay,
Wrapt round its struggling powers.

The gray morn
Dawns on the mournful scene; the sulphurous smoke
Before the icy wind slow rolls away,

And the bright beams of frosty morning dance
 Along the spangling snow. There tracks of blood,
 Even to the forest's depth, and scattered arms,
 And lifeless warriors, whose hard lineaments
 Death's self could change not, mark the dreadful path
 Of the outsallying victors: far behind
 Black ashes note where their proud city stood.
 Within yon forest is a gloomy glen—
 Each tree which guards its darkness from the day
 Waves o'er a warrior's tomb.

—*Percy Bysshe Shelley.*

vernal zephyrs, soft, gentle spring breezes.

ebon, dark in colour like ebony.

canopy, covering.

depend, hang down.

metaphor, a figure of speech by which the name and property

of an object are ascribed to another.

inebriate, furious or frantic.

portentous, indicating the approach of calamity.

lineaments, features.
glen, deep narrow vale.

EGYPT.—PART I.

1. Egypt is situated in the north-eastern part of the continent of Africa. The great river Nile flows through its entire length, and bestows upon the country beauty and fertility.

2. The source of this river was for ages unknown to the civilized world, and many attempts have been made by travellers to discover it. In 1864 Captains Speke and Grant discovered that its main stream issues from the Victoria Nyanza, one of the largest lakes in Africa, situated to the south of the equator. Livingstone and Stanley, two other great African travellers, have carefully examined the watershed of the country draining into the Victoria Nyanza, and the latter believes that he

has discovered the true source of the river in a lake which he has named the Alexandra Lake.

3. After leaving the Victoria Nyanza the Nile flows for more than a thousand miles in a northerly direction. It is then joined by the Blue Nile, which rises in Abyssinia. The united stream now flows along a devious course of 2300 miles until it reaches the Mediterranean Sea. From the sea to the first cataract, a distance of 450 miles, there is no interruption to navigation, above that it is interrupted by rapids and several cataracts.

4. The Nile below Cairo, the capital of Egypt, 100 miles from the Mediterranean, spreads out into a broad, swampy river, fringed with bulrushes and other aquatic plants, and divides into two streams, which, branching out from each other, form the very fertile Delta of the Nile.

5. The inhabited portion of Egypt proper is mainly confined to the valley of the Nile, which, in its widest part (at the Delta), does not exceed 90 miles, whilst in many parts its width is only from 4 to 5 miles. On each side of the Nile valley is the dry, scorched African desert, and if the river were to cease flowing, the fertile portion of Egypt would soon become engulfed by sand.

6. The water of the Nile is usually turbid from containing earthy matter, but when filtered it becomes clear, and is esteemed very wholesome. The most remarkable phenomenon connected with the river is its annual regular increase, arising from the periodical rains which fall far south within the tropics. As rain rarely falls in Egypt, the prosperity of the country entirely depends upon the overflowing of the river, for on the subsiding of the water the land is found to be covered with a brown, slimy deposit of mud, which so fertilizes the otherwise barren soil *that it produces three crops a year, while beyond the*

limits of the inundation there is no cultivation whatsoever, except on lands that are watered artificially.

7. The Nile begins to rise in June, and continues to increase until September. The Delta then looks like an immense marsh interspersed with islands, villages, towns, and plantations rising just above the level of the water. The water remains stationary for a few days, and then gradually begins to subside until the end of October, when the land is left dry again. Now the peasants hasten to sow the seeds. Very little digging or ploughing is required. As soon as the young plants appear above the ground they are regularly watered by an excellent system of artificial irrigation, which has been practised in Egypt for some thousands of years.

8. The water is raised from the Nile either by means of a water-wheel propelled by a donkey, or by a leathern bucket slung on the end of a pole, which is balanced on a prop and has a heavy weight placed on the other end. By the latter process a man can scoop up water that is considerably lower than where he stands, and convey it with ease into a large trough above him, from which it flows by inclined channels to the parts of the fields to be irrigated.

9. The land is soon covered with green crops, and a bountiful harvest is reaped in March. The time of the rising of the Nile is often an occasion of anxiety in Egypt, for should the inundation rise above its usual height it does great damage, and involves the population in distress; while, if it should not attain the ordinary height, there follows a deficiency of crops or famine. But so regular are the operations of nature, that the water generally rises to about the same height.

10. The atmosphere in Egypt is extremely clear and dry, the temperature regular and exceedingly hot, though

the heat is tempered during the daytime for nine months in the year by a strong wind which blows from the north, and which enables vessels to ascend the river against the stream. The winter months are delightful, the air being cool and balmy, and the ground covered with verdure; later, the ground becomes parched and dry, and in May the simoon, a hot wind, begins to blow into the valley from the desert plains, raising clouds of fine sand, and causing various diseases, until the rising of the river again comes to bless the land.

11. As above mentioned rain seldom falls, nowhere more than three or four times in the course of the year; but at night the dews are plentiful, and the air cool and refreshing. Showers of hail sometimes fall, but ice is very uncommon.

Livingstone, a missionary, and one of the greatest of African travellers. He died of fever in Central Africa in the year 1873, and his body was brought to this country by his native attendants. He is buried in Westminster Abbey.

Stanley, an American, and perhaps the most successful African traveller. He discovered and relieved Livingstone. He has since crossed the African continent from East to West, and described many countries and peoples before unknown.

devious, winding.

cataracts, waterfalls.

Delta, the name given to the tri-

angular tract of country found between the two extreme mouths of some rivers. The word is derived from the fourth letter of Greek alphabet— Δ , delta.

engulfed, covered over.

turbid, muddy, dirty.

filtered, strained through something.

phenomenon, an occurrence.

tropics, the countries lying between $23\frac{1}{2}$ degrees N. and $23\frac{1}{2}$ degrees S. of the equator.

subsiding, falling.

fertilizes, makes fruitful.

inundation, covering of land by water.

simoon, a hot, dry wind from the desert.

Where is the supposed source of the Nile? After leaving the Victoria Nyanza how far does the Nile flow before it is joined by the Blue Nile? What obstructions impede the navigation of the stream? What is the character of the river below Cairo? What is

a Delta? Describe the Nile valley. What great phenomenon is connected with the Nile? Describe it. What appearance does the Delta present at this time? How is the water required for irrigation raised from the Nile? At what periods of the year are the crops reaped? Describe the atmosphere and temperature of Egypt. What hot wind blows from the desert, and at what time of the year?

EGYPT.—PART II.

1. No country possesses such ancient or such grand monuments of antiquity as Egypt. It abounds in ruins of cities and magnificent temples, and its pyramids have been for ages the wonder of the world. More than 4000 years ago, when most nations were in a state of barbarism, Egypt was a highly civilized country. Its kings were wise and powerful, and its priests and rulers highly educated.

2. When Abraham entered Lower Egypt from Canaan, the people had long enjoyed the advantages of a settled government. They had built cities, and invented a most curious kind of writing, perhaps the most ancient in the world. It is called hieroglyphical writing, and pictures of birds, flowers, animals and men were largely used in the composition of its words. With these picture words they wrote their poetry, or related their history.

3. The records of their kings have been preserved to this day in hieroglyphics cut upon highly polished granite stones which were erected in front of temples. Some of these stones are still standing, and one of them has been brought to this country. It is called the Cleopatra Needle, and is erected upon the Thames embankment in London.



The Cleopatra Needle.

4. The Egyptians were formerly a very warlike nation, yet the country has been many times overrun by foreign foes. Ethiopians, Persians, Greeks, Romans, and Arabs have ruled them by turns. The country is now under the dominion of the Turks, and is governed by a ruler called the Khedive, or Viceroy of Egypt.

5. On the banks of the Nile there grew formerly a kind of rush called the papyrus. The ancient Egyptians used to collect this rush, strip off thin layers all round below the bark, and use these for writing upon; and many poems, written by them in hieroglyphics upon this material, are now extant. From the name of this rush our word "paper" is derived. A most singular fact is that the papyrus is now nowhere to be found in the country.

6. One peculiarity of the ancient Egyptians was the great care they took of their dead, and even of some dead animals. They brought the art of preserving dead

bodies, which is called *embalming*, to great perfection; and many thousands of these bodies have been discovered in a wonderful state of preservation. The embalmed bodies are called "mummies." A number of mummies with their cases have been brought to this country, and placed in our museums.

7. The mummies of the kings, priests, and great men are found in splendid cases made of sycamore or cedar wood. These are often richly ornamented by painting and gilding, and covered with hieroglyphics which describe the rank, position, and merits of the person whose body is found within. When a mummy case is opened, the body is found wrapped up tightly in many yards of cloth, and filled with various kinds of gums used in the embalming of it.

8. The pyramids of Egypt are the largest known buildings in the world. They are generally built on a square foundation, and usually present their sides to the cardinal points. The most famous are constructed of huge blocks of stone, so arranged that the outside looks like four immense flights of stairs leading to a small platform on the top. There are a number of them in Lower Egypt and several in Nubia. Some of them are built of unburnt bricks. The largest two are respectively 480 and 450 feet in height. The interior of several pyramids have been explored by enterprising travellers. From their discoveries it is supposed that they were intended as the burial places of kings, but for which kings can only be dimly conjectured. They form abiding memorials of the ancient condition of the country, and point out the existence of a teeming population under the rule of a great and despotic race of kings.

9. The wild animals found in Egypt are apes, monkeys, jackals, hyenas, and in Nubia the lion. The hippopotamus

and crocodile were once very abundant, but are now found only in the Upper Nile. Birds, especially water fowl, are very numerous. The ibis, in ancient times considered so sacred that the penalty for killing it was death, is still common.

10. The branch of industry for which Egypt is peculiarly well adapted by nature is agriculture, and large quantities of cereals are raised and exported; yet in that country, where three successive crops can be gathered in one year, agriculture is in a very low state, the natural consequence of the wretched condition of the heavily taxed people engaged in it. The chief articles of culture are rice, wheat, barley, maize, beans, peas, lentiles, flax, hemp, sugar-cane, and cotton. Fruits are abundant and good; apricots, peaches, pomegranates, lemons, figs, melons, and grapes are the chief.

11. Of all the great public works carried out in Egypt, the one from which that country will probably derive the greatest benefit is the Suez Canal, constructed only a few years ago. This is one of the great triumphs of modern engineering skill. It is a broad deep canal, and joins the Mediterranean to the Red Sea. Vessels of the largest size are thus enabled to go to Australia, India, China, and Japan by a much shorter route than round the Cape of Good Hope.

antiquity, old times.

barbarism, uncivilized state.

civilized, cultivated.

Cleopatra, a beautiful Queen of Egypt, about 50 B.C.

Ethiopians, inhabitants of Abyssinia.

cardinal points, N., S., E., W.

Nubia, a name given to the countries on and around the valley of the Nile, above Egypt, as far as Abyssinia.

conjectured, imagined.

cereals, grain-yielding plants.

Suez, a seaport on the Red Sea.

What monuments of antiquity are found in Egypt? What proofs have we that Egypt was a civilized country from a very early date?

Describe their kings and rulers. Describe the ancient kind of Egyptian writing. How have the records of the Egyptian kings been preserved? Name some of the nations that have conquered Egypt. What rush formerly grew on the banks of the Nile? For what purpose was it used? How did the ancient Egyptians preserve the bodies of their dead? What is a "mummy?" What wood was used in making the coffins? Describe the pyramids. For what purpose are they supposed to have been built? Name the chief wild animals of Egypt. What is remarkable about the ibis? What are the chief objects of agriculture in Egypt? Name the chief fruits that are cultivated. What great work has recently been carried out in Egypt?

THE LAST TREE OF BABYLON.

"At the distance of a few paces only to the north-north-east of this mass of walls and piers, the internal spaces of which are still filled with earth and rubbish, is the famous single tree, which the natives call 'Athelo,' and maintain to have been flourishing in ancient Babylon. This tree is of a kind perfectly unknown to these parts. It is certainly of a very great age, as its trunk, which appears to have been of considerable girth, now presents only a bare and decayed half or longitudinal section, yet the few branches which still sprout out from its venerable top are perfectly green."—*Travels in Mesopotamia*, by J. S. Buckingham.

1. There stands a lonely tree on Shinar's mount —
 No kindred stem the far-spread desert rears;—
 Scant are its leaves, forspent the juicy fount,
 Which fed its being through unnumber'd years:
 Last of a splendid race that here have stood,
 It throws an awful charm o'er ruin's solitude.

2. Lone tree! thou bear'st a venerable form—
Shrunk, yet majestic in thy late decay—
For not the havoc of the ruthless storm,
Nor simoom's blight thus wears thy trunk away;
But Time's light wing, through ages long gone past,
Hath gently swept thy side and wasted thee at last!
3. Empires have risen—flourished—moulder'd down—
And nameless myriads closed life's fleeting dream,
Since thou the peerless garden's height didst crown,
Which hung in splendour o'er Euphrates' stream!
Fountains, and groves, and palaces, were here,
And fragrance fill'd the breeze, and verdure deck'd
the year.
4. Here queenly steps in beauty's pride have trod:
Hence Babel's king his boastful survey took,
When to his trembling ear the voice of God
Denouncing woes to come, his spirit shook—
But all this grace and pomp hath passed away,
'Tis now the wondrous story of a distant day.
5. How wide and far these tracks of chaos spread,
Beyond the circuit of the lab'ring eye!
Where the proud queen of nations rais'd her head,
But shapeless wrecks and scenes of horror lie:
Glorious and beautiful no more! her face
Is darkly hid in desolation's stern embrace.
6. Sole living remnant of Chaldæa's pride!
Reluctant thou dost wear the garb of joy;
Thy heart is wither'd, strength hath left thy side—
And the green tints time spareth to destroy,
Seem like the hectic flush, which brighter glows
Upon the sunken cheek, just passing from its woes.

—H. Hutton

Shinar's mount, a mound in
 Babylon, on which the great
 brick ruin called Kasr, or
 Palace stands.
forspent, dried up.
ruthless, without mercy.
simoom, the hot wind of the
 desert.
peerless garden, the hanging

garden of Babylon, one of the
 wonders of the world.
Euphrates, the large river on
 which Babylon stood. It ran
 through the city.
Babel's king, Nebuchadnezzar.
Chaldæa, of which Babylon was
 capital.
hectic, feverish.

Sir Henry Layard in his work *Discoveries in the Ruins of Nineveh and Babylon*, 1853, says: "Near the northern edge of the ruin (called the Kasr or Palace) is the solitary tree Athelé, well-known to the Arabs, and the source of various traditions. No other tree of the same kind exists, according to the tradition, in the whole world. It is, however, I believe, a species of tamarisk, whose long feathery branches tremble in the breeze with a melancholy murmur well suited to the desolate heap over which it may have waved for a thousand years." Vol. ii. p. 507.

SIR HUMPHRY DAVY.

1. Chemical science has advanced more rapidly than any other branch of experimental philosophy within the last century. Its applications to various industrial arts become every year more numerous and more important, so that its progress is, to a considerable extent, identified with our manufacturing and commercial prosperity. Few men have contributed more to the advancement of this science than Davy, who devoted to it the labours of his entire life.

2. He was the son of a carver in wood, and was born at Penzance, December 17, 1778. From his childhood he showed a remarkable quickness in acquiring knowledge and a decided love of literature. He practised oratory, wrote poetry, and composed romances, and, at the same time, evinced a taste for experimental science.

The latter circumstance probably induced his family to bind him apprentice to Mr. Borlase, a surgeon and apothecary in the town of Penzance, who had a great taste for chemical experiments, and devoted to them the leisure moments left him by his profession.



3. Young Davy devoted himself to similar pursuits with the most extraordinary enthusiasm. He abandoned all the enjoyments and relaxations usual in youth, showed an aversion to festive society, and, when not engaged in active researches, seemed absorbed in contemplation. He had to contend against many disadvantages. The books at his command were few; his master had no philosophical apparatus, and the instruments he *employed* being of his own contrivance and manufacture

were of the rudest possible description. The gallipots and phials of his master's shop were, however, put into requisition, and with these he pursued researches which involved some of the most difficult problems in chemical analysis. At length he became possessed of a case of surgical instruments which had been saved from the wreck of a vessel. This was to him a real treasure at the time, and enabled him to pursue a series of experiments into the nature of heat, light, and their combinations.

4. The results of his investigations were published in a work edited by Dr. Beddoes, of Bristol, in 1799, and attracted much notice, as Davy's conclusions were quite opposed to Dr. Black's theory of heat, which was at that time popular in the scientific world.

5. The ardour with which Davy pursued his investigations greatly annoyed many of his neighbours, for chemistry produces many results offensive to the sense of smell, and when incautiously pursued, exposes men to danger from the bursting of the vessels they employ, or the combustion of the substances they use. His master, too, began to complain that metals, minerals, and vegetable substances absorbed the attention which should have been bestowed on his patients, many of whom remonstrated against the neglect of their real or fancied complaints for pursuits which they probably regarded as idle and useless.

6. The reports respecting the young man's vagaries, as they were deemed, reached the ear of Mr. Davies Gilbert, himself an enthusiastic lover of science. He sought young Davy's acquaintance, was struck with the extent of his acquirements, gave him the use of an excellent library, and introduced him to Dr. Edwards, who possessed a well-furnished laboratory. Mr. Gilbert after-

wards compared Davy's pleasure, when surrounded with a set of fine philosophical instruments, to the delight of a child introduced to a magazine of toys. The air-pump, known to him previously only by descriptions and engravings, more especially fixed his attention. He probably revolved in his mind the problems which he hoped to investigate by its aid, and was the more interested as some of his earliest researches were directed to the investigation of the nature of the air secreted in the vessels of marine plants.

7. He was soon after engaged as assistant to Dr. Beddoes, in the Pneumatic Institution at Bristol, and, being thus set free from the medical profession, he devoted his whole time to the cultivation of science. The inquiry which he pursued with the most ardour, was the effect of various gases and gaseous exhalations on life and health. Berthollet the younger, a chemist of high repute, had voluntarily sacrificed his life in the same investigation. He inclosed himself in an atmosphere destructive of life, wrote down his successive sensations with equal accuracy and coolness, and thus continued until the pen dropped from his hand and he fell lifeless. Davy exhibited an almost equal desperation, of which he has given the following account:—"My friend, Mr. James Tobin, being present, after a forced exhaustion of my lungs, the nose being accurately closed, I made three inspirations and expirations of the hydro-carbonate. The first inspiration produced a sort of numbness and loss of feeling in the chest and about the pectoral muscles. After the second, I lost all power of perceiving external things, and had no distinct sensation except that of a terrible oppression on the chest. During the third, this feeling subsided,—I seemed sinking into annihilation, and had just power *enough* to cut off the mouthpiece from my unclosed lips.

A short interval must have passed, during which I respired common air, before the objects around me were distinguishable. On recollecting myself I faintly articulated, 'I do not think I shall die.'"

8. The publication of these researches, and the success of the young chemist in his examination of the nature of galvanism and the structure of plants, made his name known to the leading men of science; and in 1801, on the recommendation of Count Rumford, he was appointed assistant lecturer at the Royal Institution. Davy's lectures became exceedingly popular.

9. His fame soon spread abroad. The Board of Agriculture engaged his services as professor of chemistry; and the Royal Society, of which he became secretary in 1807, frequently applied to him to deliver the annual Bakerian lecture. But these engagements did not divert his attention from experimental research.

10. His discoveries in chemical and electrical science were announced every year, to the surprise and admiration of philosophers; but his highest fame arose from his determination of the laws of voltaic electricity, by which he might be said to have created an entirely new branch of science.

11. Though England was then at war with France, the Imperial Institute of Paris awarded him a prize of three thousand francs, which he accepted, declaring that "if governments are at war men of science are not." Honours now began to be proffered him from various quarters. The University of Dublin created him a Doctor of Laws; he was knighted by the Prince Regent; and elected an honorary member of most of the learned bodies in England and on the Continent.

12. After the return of Napoleon from Elba in 1814, Sir Humphry Davy, anxious to visit the extinct volcanoes in

Auvergne, solicited permission to travel in France, which was immediately granted. The greatest attention and respect were shown him by the men of science in Paris.

13. On his return to England, in 1815, he resolved to turn his attention to the fire-damp, or explosive gas, found in coal-mines, which had been the cause of many dreadful accidents. After a long series of experiments, he discovered that if the flame of a lamp was protected by a wire gauze, the gases brought into contact with the lamp would not explode, while the light would still be preserved.



The Davy Lamp.

14. This great discovery, which enabled miners to work in the midst of danger with perfect safety, was justly appreciated by the coal-owners of the north of England. They invited him to a public dinner at Newcastle, and presented him with a service of plate, valued at two thousand pounds. The Emperor of Russia sent him a splendid silver vase as a testimony of regard, and he was created a baronet by the Prince Regent. But his best reward was the consciousness that the simple implement which he had invented, annually saved hundreds of lives. In 1820, he was elected president of the Royal Society, to whose *Transactions* he continued to contribute papers on subjects of the greatest interest for several years.

15. He resigned his office in the Royal Society, and went to Italy for the benefit of his health, where he amused

himself in writing his *Consolations in Travel, or The Last Days of a Philosopher*. These last days were fast approaching. He quitted Italy in a very weak state, but had only reached Geneva on his way home, when he died on the 29th of May, 1829.

chemical science, the science of chemistry reducing everything to its elements.

experimental philosophy, the discovery of truth by experiment and observation.

identified, so closely connected as to be like the same thing.

oratory, the art of speaking in public.

enthusiasm, earnest zeal.

relaxations, amusements.

aversion to festive society, dislike to gay society.

contemplation, thought.

gallipots and phials, the vessels used in a surgery.

chemical analysis, the practical part of chemistry.

investigations, research or careful inquiry.

combustion, burning up.

absorbed, engaged.

vagaries, follies.

secreted, hidden.

Pneumatic Institution—for the purpose of investigating the laws of atmospheric air.

exhalations, effluvia.

pectoral muscles, the muscles of the breast and chest.

annihilation, nothingness.

galvanism, a science first discovered by Galvani, 1790.

Bakerian lecture. Henry Baker, an eminent naturalist, born 1703, died 1774. He left £100 to the Royal Society for an annual lecture on anatomy or chemistry.

voltaic electricity, so called from Volta, its discoverer, 1792.

proffered, offered for acceptance.

Auvergne, a province in Central France.

quitted, left.

Describe Davy's tastes as a child. Give an account of his apprenticeship. What was his first real treasure? Whose theory did he oppose in his first publication? How did his apprenticeship end? How did he obtain access to a good laboratory? Where was he first engaged in a public institution? Describe Davy's dangerous experiment. Give the steps of his future promotions. State what honours were awarded to him. Describe his great discovery and its important results. When and where did he die?



LABOUR.

1. Labour is rest—from the sorrows that greet us;
Rest from all petty vexations that meet us,
Rest from sin-promptings that ever entreat us,
Rest from world-syrens that lure us to ill.
Work—and pure slumbers shall wait on thy pillow;
Work—thou shalt ride o'er Care's coming billow;
Lie not down wearied 'neath Woe's weeping willow!
Work with a stout heart and resolute will!
2. Labour is health! Lo the husbandman reaping!
How through his veins goes the life-current leaping;
How his strong arm, in its stalwart pride sweeping,
Free as a sunbeam the swift sickle guides.
Labour is wealth—in the sea the pearl groweth,
Rich the queen's robe from the frail cocoon floweth,
From the fine acorn the strong forest bloweth,
Temple and statue the marble block hides.
3. Droop not—though shame, sin, and anguish are round
thee;
Bravely fling off the cold chain that hath bound thee;
Look to yon pure heaven smiling beyond thee:
Rest not content in thy darkness a clod!
Work for some good, be it ever so slowly;
Cherish some flower, be it ever so lowly;
Labour!—all labour is noble and holy;
Let thy great deeds be thy prayer to thy God.
4. Pause not to dream of the future before us;
Pause not to weep the wild cares that come o'er us;
Hark! now Creation's deep musical chorus
Unintermitting goes up into Heaven!
Never the ocean-wave falters in flowing;

Never the little seed stops in its growing;
More and more richly the rose-heart keeps glowing,
Till from its nourishing stem it is riven.

Labour is life!—'Tis the still water faileth;
Idleness ever despaireth, bewaileth;
Keep the watch wound, for the dark rust assaileth;
Flowers droop and die in the stillness of noon;
Labour is glory! The flying cloud lightens;
Only the waving wing changes and brightens;
Idle hearts only the dark future frightens;
Play the sweet keys, would'st thou keep them in tune!

—*Frances Osgood.*

syrens, tempters to evil.
resolute, firm.
stalwart, brave, strong.
oooon, the silken ball in which
the silkworm confines itself be-
fore its change.

anguish, agony.
unintermitting, without ceasing.
falters, becomes slow and weary.
riven, torn.
bewaileth, mourns.
assaileth, attacks.

QUEEN ISABELLA'S RESOLVE.

QUEEN ISABELLA OF SPAIN, DON GOMEZ, AND COLUMBUS.

Isabella. And so, Don Gomez, it is your conclusion that we ought to dismiss the proposition of this worthy Genoese.

Don Gomez. His scheme, your majesty, seems to me fanciful in the extreme; but I am a plain matter-of-fact man, and do not see visions and dreams like some.

Isa. And yet Columbus has given us cogent reasons for believing that it is practicable to reach the eastern coast of India by sailing in a westerly direction.

Don G. Admitting that his theory is correct, namely, that the earth is a sphere, how would it be possible for

him to return, if he once descended that sphere in the direction he proposes? Would not the coming back be all uphill? Could a ship accomplish it with even the most favourable wind?

Columbus. Will your majesty allow me to suggest that, if the earth is a sphere, the same laws of adhesion and motion must operate at every point on its surface; and the objection of Don Gomez would be quite as valid against our being able to return from crossing the Strait of Gibraltar.

Don G. This gentleman, then, would have us believe the monstrous absurdity, that there are people on the earth who are our antipodes, who walk with their heads down, like flies on the ceiling.

Col. But, your majesty, if there is a law of attraction which makes matter gravitate to the earth, and prevents its flying off into space, may not this law operate at every point on the round earth's surface?

Isa. Truly, it so seems to me; and I perceive nothing absurd in the notion that this earth is a globe floating or revolving in space.

Don G. May it please your majesty, the ladies are privileged to give credence to many wild tales which we plain matter-of-fact men cannot admit. Every step I take confutes this visionary idea of the earth's rotundity. Would not the blood run into my head if I were standing upside down? Were I not fearful of offending your majesty, I would quote what the great Lactantius says.

Isa. We are not vain of our science, Don Gomez; so let us have the quotation.

Don G. "Is there anyone so foolish," he asks, "as to believe that there are antipodes with their feet opposite to ours—that there is a part of the world in which all things are topsy-turvy, where the trees grow with their

branches downward, and where it rains and snows upward?"

Col. I have already answered this objection. If there



are people on the earth who are our antipodes, it should be remembered that we are theirs also.

Don G. Really, that is the very point wherein we matter-of-fact men abide by the assurance of our own senses. We know that we are not walking with our heads downwards.

Isa. To cut short the discussion, you think that the

enterprise which the Genoese proposes, is one unworthy of our serious consideration; and that his theory of an unknown shore to the westward of us is a fallacy.

Don G. As a plain matter-of-fact man, I must confess that I so regard it. Has your majesty ever seen an ambassador from this unknown coast?

Isa. Don Gomez, do you believe in the existence of a world of spirits? Have you ever seen an ambassador from that unknown world?

Don G. Certainly not. By faith we look forward to it.

Isa. Even so by faith does the Genoese look forward, far over misty ocean, to an undiscovered shore.

Col. Your majesty is right; but let it be added that I have reasons, oh! most potent and resistless reasons, for the faith that is in me; the testimony of many navigators who have picked up articles that must have drifted from this distant coast; the nature of things admitting that the earth is round; the reports current among the people of one of the northern nations, that many years ago their mariners had sailed many leagues westward till they reached a shore where the grape grew abundantly; these and other considerations have made it the fixed persuasion of my mind that there is a great discovery reserved for the man who will sail patiently westward, trusting in God's good providence, and turning not back till he has achieved his purpose.

Don G. Then truly we should never hear of him again. Speculation! mere speculation, your majesty! When this gentleman can bring forward some solid facts that will induce us plain matter-of-fact men to risk money in forwarding his enterprise, it will then be time enough for royalty to give it heed. Why, your majesty, the very boys in the streets point at their foreheads as he *passes* along.

Isa. And so you bring forward the frivolity of boys jeering at what they do not comprehend, as an argument why Isabella should not give heed to this great and glorious scheme? Ay, sir, though it should fail, still, it has been urged in language so intelligent and convincing by this grave and earnest man, whom you think to under-value by calling him an adventurer, that I am resolved to test the "absurdity," as you style it, and that forthwith.

Don G. Your majesty will excuse me if I remark, that I have from your royal consort himself the assurance that the finances are so exhausted by the late wars, that he cannot consent to advance the necessary funds for fitting out an expedition of the kind proposed.

Isa. Be *mine*, then, the privilege! I have jewels by the pledging of which I can raise the amount required; and I have resolved that they shall be pledged to this enterprise without any more delay.

Col. Your majesty shall not repent your heroic resolve. I will return, your majesty; be sure I will return, and lay at your feet such a jewel as never queen wore yet, an imperishable fame,—a fame that shall couple with your memory the benedictions of millions yet unborn, in climes yet unknown to civilized man. There is an uplifting presentiment in my mind, a conviction that your majesty will live to bless the hour you came to this decision.

Don G. A presentiment! A plain matter-of-fact man, like myself, must take leave of your majesty, if his practical common sense is to be met and superseded by presentiment. An ounce of fact, your majesty, is worth a ton of presentiment.

Isa. That depends altogether upon the source of the presentiment, Don Gomez. If it comes from the fountain of all truth shall it not be good?

Don G. I humbly take my leave of your majesty.—Vivret.

proposition, proposal.

Genoese, a native of Genoa—a famous seaport, northern Italy.

Columbus, a native of Genoa.

cogent, irresistible.

adhesion, attraction.

credence, belief.

visionary, fanciful or imaginary.

Lactantius, one of the fathers of the Latin Church, born about

the year A.D. 250. He was a celebrated teacher of eloquence.

ambassador, deputy.

navigators, seamen.

achieved, accomplished.

speculation, theory.

enterprise, undertaking.

frivolity, trifling conduct.

benedictions, blessings.

presentiment, foreboding.

What reasons did Don Gomez advance in proof that the earth is not a sphere? How did Columbus reply? What reasons did Columbus give for his belief that he would discover land by sailing in a westerly direction? How did Queen Isabella meet the difficulty of want of funds?

DISCOVERY OF THE NEW WORLD.

1. At sunrise, on the second day, some rushes recently torn up were seen near the vessels. A plank, evidently hewn by an axe, a stick skilfully carved by some cutting instrument, a bough of hawthorn in blossom; and lastly, a bird's nest built on a branch which the wind had broken, and full of eggs, on which the parent bird was sitting amid the gently-rolling waves, were seen floating past on the waters. The sailors brought on board these living and inanimate witnesses of their approach to land. They were a voice from the shore confirming the assurances of Columbus. Before the land actually appeared in sight, its neighbourhood was inferred from these marks of life.

2. The mutineers fell on their knees before the Admiral whom they had insulted but the day before, craved pardon for their mistrust, and struck up a hymn of thanksgiving to God for associating them with this triumph. Night fell on these songs welcoming a new world. The Admiral gave orders that the sails should be close-reefed, and the

lead kept going; and that they should sail slowly, being afraid of breakers and shoals, and feeling certain that



the first gleam of daybreak would discover land under their bows.

3. On the last anxious night none slept. Impatient expectation had removed all heaviness from their eyes; the pilots and the seamen, clinging about the masts, yards, and shrouds, each tried to keep the best place and the closest watch to get the earliest sight of the new hemisphere. The Admiral had offered a reward to the first who should cry "Land," provided his announcement was verified by its actual discovery.

4. Providence, however, reserved to Columbus himself this first glimpse, which he had purchased at the expense of twenty years of his life, and of untiring perseverance. While walking the quarter-deck alone, at midnight, and sweeping the dark horizon with his keen eye, a gleam of fire passed and disappeared, and again showed itself on the level of the waves. Fearful of being deceived by the phosphorescence of the sea, he quietly called a Spanish gentleman of Isabella's court, in whom he had more confidence than in the pilots, pointed out the direction in which he had seen the light, and asked him whether he could discern anything there.

5. He replied that he did, indeed, see a flickering light in that quarter. To make the fact still more sure, Columbus called another in whom he had confidence to look in the same direction. He said he had no hesitation in pronouncing there was a light on the horizon. But the blaze was hardly seen before it again disappeared in the ocean, to show itself anew the next moment. Whether it was the light of a fire on a low shore, alternately appearing and disappearing beyond the broken horizon, or whether it was the floating beacon of a fisherman's boat, now rising on the waves, and now sinking in the trough of the sea, they could not determine.

6. Thus both land and safety appeared together in the shape of fire to Columbus and his two friends, on the night between the 11th and 12th of October, 1492. The Admiral, enjoining silence, kept his observation to himself, for fear of again raising false hopes, and giving a bitter disappointment to his ships' companies. He lost sight of the light, and remained on deck until two in the morning, praying, hoping, and despairing alone, awaiting the *triumph* or the *return* on which the morrow was to *decide*.

7. He was seized with that anguish which precedes the great discoveries of truth, when suddenly a cannon-shot, sounding over the sea a few hundred yards in advance of him, burst upon his ear the announcement of a *new-born world*, which made him tremble and fall upon his knees. It was the signal of land in sight! made by firing a shot, as had been arranged with the *Pinta*, which was sailing in advance of the squadron to guide their course and take soundings.

8. At this signal a general shout of "*Land ho!*" arose from all the yards and riggings of the ships. The sails were furled, and daybreak was anxiously awaited. The mystery of the ocean had breathed its first whisper in the bosom of the night. Daybreak would clear it up openly to every eye. Delicious and unknown perfumes reached the vessels from the outline of the shore, with the roar of the waves upon the reefs and the soft land breezes.

9. The fire seen by Columbus indicated the presence of man, and of the first element of civilization. Never did the night appear so long in clearing away from the horizon; for this horizon was to Columbus and his companions the second creation of God. The dawn, as it spread over the sky, gradually raised the shores of an island from the waves. Its distant extremities were lost in the morning mist. It ascended gradually, like an amphitheatre, from the low beach to the summit of the hills, whose dark green covering contrasted strongly with the blue heavens.

10. Within a few paces from where the foam of the waves breaks on the yellow sand, forests of tall and unknown trees stretched away, one above another, over the successive terraces of the island. Green valleys and bright clefts in the hollows afforded a half-glimpse into these mysterious wilds. Here and there could be dis-

covered a few scattered huts, which, with their outlines and roofs of dry leaves, looked like bee-hives, and thin columns of blue smoke rose above the tops of the trees. Half-naked groups of men, women, and children, more astonished than frightened, appeared among the thickets near the shore, advancing timidly, and then drawing back, exhibiting by their gestures and demeanour as much fear as curiosity and wonder, at the sight of these strange vessels, which the previous night had brought to their shores.

11. Columbus, after gazing in silence on this foremost shore of the land so often determined by his calculations, and so magnificently coloured by his imagination, found it to exceed even his own expectations. He burned with impatience to be the first European to set foot on the sand, and to plant the flag of Spain—the standard of the conquest of God and of his sovereigns, effected by his genius. But he restrained the eagerness of himself and of his crew to land, being desirous of giving to the act of taking possession of a new world a solemnity worthy of the greatest deed, perhaps, ever accomplished by a seaman; and, in default of men, to call God and His angels, sea, earth, and sky, as witnesses of his conquest of an unknown hemisphere.

12. He put on all the insignia of his dignities as Admiral of the Ocean, and the Viceroy of these future realms; he wrapped himself in his purple cloak, and taking in his hand an embroidered flag, in which the initials of Ferdinand and Isabella were interlaced, like their two kingdoms, and, surmounted by a crown, he entered his boat and pulled toward the shore, followed by the boats of his two lieutenants.

13. On landing, he fell on his knees, to acknowledge, *by this act of humility and worship, the goodness and*

greatness of God in this new sphere of His works. He kissed the ground, and, with his face on the earth, he wept tears of double import, as they fell on the dust of this hemisphere, now for the first time visited by Europeans—tears of joy for the overflowing of a proud spirit, grateful and pious—tears of sadness for this virgin soil, seeming to foreshadow the calamities and devastation, with fire and sword, and blood and destruction, which the strangers were to bring with their pride, their knowledge, and their power.

14. He then gave to this land the name of San Salvador. His lieutenants, his pilots, and his seamen, full of gladness, and impressed with a superstitious respect for him whose glance had pierced beyond the visible horizon, and whom they had offended by their unbelief—overcome by the evidence of their eyes, and by that mental superiority which overawes the minds of men, fell at the feet of the Admiral, kissed his hands and his clothes, and recognized, for a moment, the power of genius; *yesterday* the victims of his obstinacy—*now* the companions of his success, and sharers in the glory which they had mocked.—*Lamartine*.

Columbus set sail from Saltes near Palos, a town in Spain, on Friday the 3d of August, 1492, with three vessels and 120 men. On the evening of the 10th of October he promised his men, who had mutinied, that if they would obey his commands for *three days* longer, and if during that time land were not discovered, he would abandon the enterprise and return to Spain.

mutineers, those who resist orders.

verified, proved to be true.

phosphorescence, a shining with a faint light like that of phosphorus.

amphitheatre, circular theatre, with seats rising behind each other.

demeanour, behaviour.

restrained, kept back.

default, absence.

insignia, ornaments denoting rank.

viceroi, one who rules in the name of a king.

initials, first letters.

interlaced, united as by lacing together.

devastation, laying waste.

What evidences had Columbus that he was not far from land? What effect had these evidences upon the mutineers? Describe what Columbus saw when walking the quarter-deck alone at midnight. To whom did he first communicate his thoughts? How was this announcement of the discovery of land made known? Describe the appearance of the land from the vessels on the morning of the 12th of October, 1492. What did Columbus do on landing? Describe the conduct of the officers and seamen towards Columbus.

THE SHIP-BUILDERS.

1. The sky is ruddy in the east,
The earth is gray below,
And, spectral in the river mist,
The ship's white timbers show.
Then let the sounds of measured stroke
And grating saw begin;
The broad-axe to the gnarled oak,
The mallet to the pin!
2. Hark!—roars the bellows, blast on blast,
The sooty smithy jars,
And fire-sparks, rising far and fast,
Are fading with the stars.
All day for us the smith shall stand
Beside that flashing forge;
All day for us his heavy hand
The groaning anvil scourge.
3. From far-off hills, the panting team
For us is toiling near;
For us the raftsmen down the stream
Their island barges steer.
Rings out for us the axe-man's stroke
In forests old and still,—

For us the century-circled oak
Falls crashing down the hill.

4. Up! up!—in nobler toil than ours
No craftsmen bear a part:
We make of Nature's giant powers
The slaves of human art.



Lay rib to rib and beam to beam,
And drive the treenails free;
Nor faithless joint nor yawning seam
Shall tempt the searching sea!

5. Where'er the keel of our good ship
The sea's rough field shall plough,—
Where'er her tossing spars shall drip
With salt-spray caught below,—

That ship must heed her master's beck,
Her helm obey his hand,
And seamen tread her reeling deck
As if they trod the land.

6. Her oaken ribs the vulture-beak
Of northern ice may peel;
The sunken rock and coral peak
May grate along her keel;
And know we well the painted shell
We give to wind and wave,
Must float, the sailor's citadel,
Or sink, the sailor's grave!
7. Ho!—strike away the bars and blocks,
And set the good ship free!
Why lingers on these dusty rocks
The young bride of the sea?
Look! how she moves adown the grooves,
In graceful beauty now!
How lowly on the breast she loves
Sinks down her virgin prow!
8. God bless her! wheresoe'er the breeze
Her snowy wing shall fan,
Aside the frozen Hebrides,
Or sultry Hindostan!
Where'er, in mart or on the main,
With peaceful flag unfurled,
She helps to wind the silken chain
Of commerce round the world!
9. Speed on the ship! But let her bear
No merchandise of sin,
No groaning cargo of despair
Her roomy hold within;

No Lethean drug for Eastern lands,
Nor poison-draught for ours;
But honest fruits of toiling hands
And Nature's sun and showers.

10. Be hers the prairie's golden grain,
The desert's golden sand,
The clustered fruits of sunny Spain,
The spice of Morning-land!
Her pathway on the open main
May blessings follow free,
And glad hearts welcome back again
Her white sails from the sea!

—*J. G. Whittier.*

ruddy, of a red colour.

spectral, like a ghost.

gnarled, old and knotted.

century-circled, having rings or layers of wood, showing it to be centuries old.

treenails, wooden pins fastening the outside planks to the beams.

Hebrides, islands on W. of Scotland.

Lethean, producing stupor, so called from the fabled river Lethe, whose waters had the power of producing entire forgetfulness.

prairies, the vast plains of N. America.

ORIGIN AND USE OF MONEY.

1. When the division of labour has been once thoroughly established, it is but a very small part of a man's wants which the produce of his own labour can supply. He supplies the far greater part of them by exchanging that surplus part of the produce of his own labour which is over and above his own consumption, for such parts of the produce of other men's labour as he has occasion for. Every man thus lives by exchanging, or becomes in some measure a merchant, and society itself grows to be what is properly a commercial society.

2. But when the division of labour first began to take place, this power of exchanging must frequently have been very much clogged and embarrassed in its operations. One man, we shall suppose, has more of a certain commodity than he himself has occasion for, while another has less. The former, consequently, would be glad to dispose of, and the latter to purchase, a part of this superfluity. But if this latter should chance to have nothing that the former stands in need of, no exchange can be made between them. The butcher has more meat in his shop than he himself can consume, and the brewer and the baker would each of them be willing to purchase part of it. But they have nothing to offer in exchange except the different productions of their respective trades, and the butcher is already provided with all the bread and beer which he has immediate occasion for. No exchange can, in this case, be made between them. He cannot be their merchant, nor they his customers; and they are all of them thus less mutually serviceable to one another.

3. In order to avoid the inconveniency of such situations, every prudent man in every period of society, after the first establishment of the division of labour, must naturally have endeavoured to manage his affairs in such a manner as to have at all times by him, besides the peculiar produce of his own industry, a certain quantity of some article or other, such as he imagined few people would be likely to refuse in exchange for the produce of their industry.

4. Many different commodities, it is probable, were successively both thought of and employed for this purpose. In the rude ages of society, cattle are said to have been the common instruments of commerce; and, though *they must have been a most inconvenient one, yet in old*

times we find things were frequently valued according to the number of cattle which had been given in exchange for them.

5. The armour of Diomedes, says Homer, cost only nine oxen; but that of Glaucus cost an hundred oxen. Salt is said to be the common instrument of commerce and exchange in Abyssinia; a species of shells in some parts of the coast of India; dried cod at Newfoundland; tobacco in Virginia; sugar in some of the West India colonies; hides or dressed leather in some other countries; and there was, about a hundred years ago, a village in Scotland where it was not uncommon for a workman to carry nails instead of money to the baker's shop.

6. In all countries, however, men seem at last to have been determined by irresistible reasons to give the preference for this employment to metals above every other commodity. Metals can not only be kept with as little loss as any other commodity, scarce anything being less perishable than they are, but they can likewise, without any loss, be divided into any number of parts, as by fusion those parts can easily be re-united again; a quality which no other equally durable commodities possess, and which, more than any other quality, renders them fit to be the instruments of commerce and circulation. The man who wanted to buy salt, for example, and had nothing but cattle to give in exchange for it, must have been obliged to buy salt to the value of a whole ox or a whole sheep at a time.

7. He could seldom buy less than this, because what he was to give for it could seldom be divided without loss; and, if he had a mind to buy more, he must, for the same reasons, have been obliged to buy double or triple the quantity, the value, to wit, of two or three oxen, or of two or three sheep. If, on the contrary, instead of

sheep or oxen he had metals to give in exchange for it, he could easily proportion the quantity of the metal to the precise quantity of the commodity which he had immediate occasion for.

s. Different metals have been made use of by different nations for this purpose. Iron was the common instrument of commerce among the ancient Spartans; copper among the ancient Romans, and gold and silver among all rich and commercial nations.—*Adam Smith.*

surplus, excess.
commercial, mercantile.
embarrassed, made difficult.
commodity, article.
superfluity, over-abundance.
respective, several.
mutually, reciprocally.

prudent, practically wise.
Diomedes, } heroes mentioned by
Glaucus, } Homer.
species, kind.
irresistible, not to be resisted.
fusion, melting. [Greece.
Spartans, a people of ancient

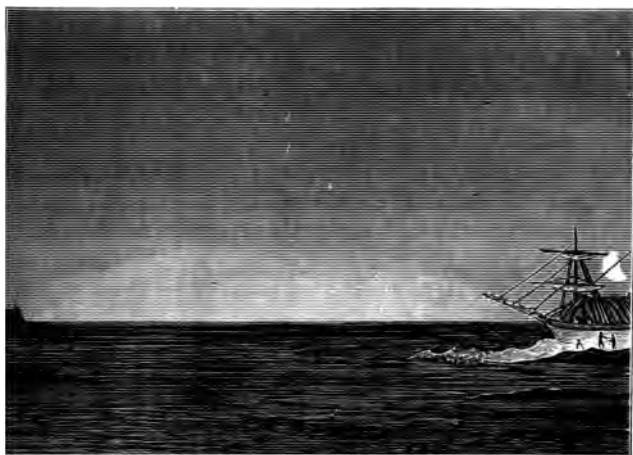
How are the most of man's wants supplied? What may you style one who exchanges? What difficulties arose at first when exchanges were made? Give instances where exchange of commodities became inconvenient and impracticable. What articles were used in the rude ages of society as instruments of commerce? Give the respective values of the armour of Diomedes and Glaucus. What is said to be the article of exchange in Abyssinia? What on some parts of the coast of India? What at Newfoundland? Why have metals been generally preferred as the instrument of exchange? Give the different metals used by different nations of antiquity.

MIDNIGHT IN THE NORTH.

1. We are all on deck to-night, passengers and sailors, leaning on the bulwarks and looking towards the north. It is eleven o'clock, and the sun has but lately set. We can see exactly where he is below that line of distant

hills upon the shore. They were dull gray two hours ago, but now they have a tint of deepest purple, and their outlines are wondrously sharp. There is a thin film—a mere transparent veil of cirro-stratus or halo-cloud out there—a sheet of what would be thin fog, but that it is some two or three miles high.

2. The colours of the sunset cling to this, and the sun below the horizon throws a clear and definite light upon it as upon a screen. It marks distinctly the position of the sun, and thus we are able to watch him gliding on



slowly from west to north, sinking in the meanwhile a little more. Now it is midnight, and the subterranean sun due north. There is light enough to read a newspaper if it face the north. Just over the sun is a vanishing semicircle of buff light; westward it grows to orange, and from this orange zone broad bands of browning red stretch upwards and outwards.

3. On the eastern side the buff tint melts and darkens into a fresh cool gray. Further on, in a widening circle, extending upwards and eastwards and westwards to the south horizon, all these colours melt away gradually to neutral gloominess. There, at the southern meeting-place of sea and sky, both are mingled in one heavy leaden semi-darkness. This is the region of night; still further on, over the bending sea, men have been burning gas and candles for the last three hours or more. We have all learned book-wise that it is so, but here the southward darkness is visible. So are the sunny midnights of the opposite north. There is the sun, obvious though unseen; his body hidden by the earth's rotundity; but the lighted atmosphere, visible beyond the distant mountain tops, shows both his presence and position in the region of continuous summer day.

4. Thus visible all at once from the ship's deck are evening and morning, night and day; sunrise and sunset seen together. Though definitely separated by the north midnight glow, the character of each marked most distinctly and shown in curious contrast. Why there should be such difference I am not able to explain; why the sun's rays in passing westward should tint the sky with warm, languid, evening colours, while those spreading upwards at the same moment towards the east should look so cool, and gray, and wakeful, I cannot tell; but here they are side by side, and unmistakably contrasted. We all linger on the deck long after midnight, then one by one descend.

5. I had scarcely reached the cabin-door, when I heard the mate call to the captain to look over the starboard-bow at a ship on fire. Of course I hastened upon deck again, and looked over the starboard-bow forthwith. We soon perceived that it was not a ship on fire, but the

moon reddened by the veil of misty cloud, rising behind a ship on the horizon, and looking like a dull lurid flame over the deck and between the masts and sails.

6. It was the half-moon, of huge apparent size, rising point upwards out of the eastern leaden-gray part of the sea. She had a dull, scowling visage, as though angry with the sun for cheating her of her nocturnal supremacy. The form of the moon was curiously distorted by the unequally refractive power of the strata of air through which her different parts were seen, the lower limb being unusually lifted and flattened upwards, as though it were soft, and had been dubbed against the hard metallic horizon.—*Through Norway with a Knapsack.*

bulwarks, ship's sides.

horizon, the circular line which bounds the view of the sky and the earth, formed by their apparent meeting.

subterranean, under the earth.

obvious, evident.

languid, faint.

starboard, right side of a ship.

nocturnal, nightly.

supremacy, superior brightness.

distorted, out of shape.

Describe the distant hills in the north after the sun has set. What is the appearance of the sky in the north? Describe the appearance of the sky in the east and south. Give an account of the rising of the moon. Why did the moon appear so curiously distorted?



ICE MOUNTAINS IN GREENLAND.

'Tis sunset: to the firmament serene
The Atlantic wave reflects a gorgeous scene;
Broad in the cloudless west, a belt of gold
Girds the blue hemisphere; above unroll'd,

The keen clear air grows palpable to sight,
Embodied in a flush of crimson light,
Through which the evening star, with milder gleam,
Descends to meet her image in the stream.



Far in the east, what spectacle unknown
Allures the eye to gaze on it alone?
—Amidst black rocks that lift in either hand
Their countless peaks, and mark receding land;
Amidst a tortuous labyrinth of seas
That shine around the arctic Cyclades;

Amidst a coast of dreariest continent,
In many a shapeless promontory rent;
—O'er rocks, seas, islands, promontories spread,
The iceberg rears its undulated head;
On which the sun, beyond the horizon shrined,
Hath left his richest garniture behind;
Piled on a hundred arches, ridge by ridge,
O'er fixed and fluid strides the Alpine bridge,
Whose blocks of sapphire seem to mortal eye
Hewn from cerulean quarries of the sky;
With glacier battlements that crowd the spheres,
The slow creation of six thousand years,
Amidst immensity in towers sublime,
Winter's eternal palace, built by Time.
All human structures by his touch are borne
Down to the dust; mountains themselves are worn
With his light footstep; *here* for ever grows,
Amid the region of unmelting snows,
A monument, where every flake that falls
Gives adamantine firmness to the walls.
The sun beholds no mirror, in his race,
That shows a brighter image of his face;
The stars, in their nocturnal vigils, rest
Like signal fires on its illumined crest;
The gliding moon around the rampart wheels,
And all its magic lights and shades reveals;
Beneath, the tide with idle fury raves
To undermine it through a thousand caves,
Rent from its roof though thundering fragments oft
Plunge to the gulf, immovable aloft,
From age to age, in air, o'er sea, on land,
Its turrets heighten, and its piers expand.

—James Montgomery.

firmament, the sky.
gorgeous, splendid.
palpable, evident.
allures, entices.
receding, retreating.
tortuous, winding.
labyrinth, a place full of windings.

Cyclades, a cluster of islands.
garniture, ornament.
sapphire, a blue gem.
cerulean, sky coloured.
adamantine, extremely hard.
nocturnal, nightly.
vigils, watches.

FALLS OF THE ZAMBESI.

1. Of the African rivers that flow into the Indian Ocean, the largest, so far as is yet known, is the Zambesi, which appears to drain a vast extent of inland country. Its celebrated falls are thus described by Dr. Livingstone:—

2. "Have you smoke that sounds in your country?" This is one of the first questions put to the traveller on the shores of the Upper Zambesi, in reference to the Falls of Victoria. The natives do not go near enough to examine these falls; but, viewing them with awe, at a distance, said to Dr. Livingstone, "Smoke sounds there." "Being persuaded," says the adventurous and distinguished doctor, "that Mr. Oswell and myself were the very first Europeans who ever visited the Zambesi in the centre of the country, and that this cataract is the connecting link between the known and unknown portions of that river, I decided to give it the name of Victoria."

3. "After twenty minutes' sail from Kalai," Dr. Livingstone continues, "we came in sight for the first time of the columns of vapour appropriately called 'smoke,' rising at a distance of five or six miles, exactly as when large tracts of grass are burned in Africa. Five columns now arose, and, bending in the direction of the wind, they seemed placed against a low ridge covered with

trees; the tops of the columns at this distance appeared to mingle with the clouds. They were white below, and higher up became dark, so as to simulate smoke very closely.

4. "The whole scene was extremely beautiful; the banks and islands dotted over the river are adorned with sylvan vegetation of great variety of colour and form. Each tree has its own physiognomy. There, towering over all, stands the great burly baobab, each of whose enormous arms would form the trunk of a large tree; besides groups of graceful palms, which, with their feathery-shaped leaves depicted on the sky, lend their beauty to the scene. As a hieroglyphic, they always mean far from home; for one can never get over their foreign air in a picture or landscape.

5. "The silver mohonono, which in the tropics is in form like the cedar of Lebanon, stands in pleasing contrast with the dark colour of the motsouri, whose cypress form is dotted over with its pleasant scarlet fruit. Some trees resemble the great spreading oak, others assume the character of our own elms and chestnuts; but no one can imagine the beauty of the view from any scenery witnessed in England. It had never been seen before by European eyes. The falls are bounded on three sides by ridges 300 or 400 feet in height. The only want felt is that of mountains in the back-ground.

6. "When about half a mile from the falls I left the canoe by which we had come down thus far, and embarked in a lighter one with men well acquainted with the rapids, who, by passing down the centre of the stream in the eddies and still places caused by many jutting rocks, brought me to an island situated in the middle of the river, and on the edge of the lip over which the water rolls.

7 "The river was now low, and we sailed where it is totally impossible to go when the water is high. But though we were within a few yards of the spot a view from which would solve the whole problem, I believe that no one could perceive where the vast body of water went. It seemed to lose itself in the earth, the opposite lip of the fissure into which it disappeared being only 80 feet distance. Creeping with awe to the verge, I peered down into a large rent which had been made from bank to bank of the broad Zambesi, and saw that a stream of 1000 yards broad leaped down 100 feet, and then became suddenly compressed into a space of 15 or 20 yards.

8. "The entire falls are simply a crack made in a hard basaltic rock from the right to the left bank of the Zambesi, and then prolonged from the left bank away through 30 or 40 miles of hills. If one imagines the Thames, filled with low tree-covered hills, immediately beyond the tunnel, extending as far back as Gravesend, the bed of black basaltic rock instead of London mud, and a fissure made therein from one end of the tunnel to the other, down through the keystone of the arch, and prolonged from the left end of the tunnel through 30 miles of hills, the pathway being 100 feet down from the bed of the river instead of what it is, with the lips of the fissure from 80 to 100 feet apart; then fancy the Thames leaping bodily into the gulf, and forced there to change its direction, and flow from the right to the left bank, and then rush boiling and roaring through the hills,—he may have some idea of what takes place at this the most wonderful sight I had witnessed in Africa.

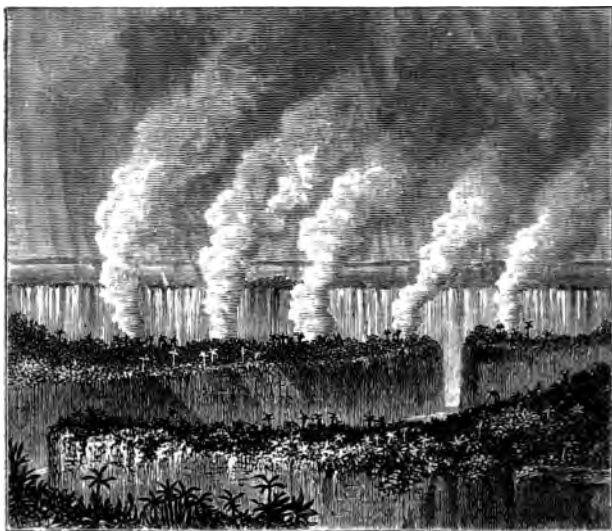
9. "In looking down through the fissure on the right of the island one sees nothing but a dense white cloud, which, at the time we visited the spot, had two bright rainbows on it. From this cloud rushed up a great jet

of vapour exactly like steam, and it mounted 200 or 300 feet high; there condensing, it changed its hue to that of dark smoke, and came back in a constant shower, which soon wetted us to the skin. This shower falls chiefly on the opposite side of the fissure, and a few yards back from the lip there stands a straight edge of evergreens, whose leaves are always wet. From their roots a number of little rills run back into the gulf; but as they flow down the steep wall there, the column of vapour, in its ascent, licks them up clean off the rock, and away they mount again. They are constantly running down, but never reach the bottom.

10. "On the left of the island we see the water at the bottom—a white, rolling mass, moving away to the prolongation of the fissure, which branches off near the left bank of the river. The walls of this gigantic crack are perpendicular, and composed of one homogeneous mass of rock. The edge of that side over which the water falls is worn off two or three feet; and pieces have fallen away, so as to give it somewhat of a serrated appearance. That over which the water does not fall is quite straight, except at the left corner, where a rent appears, and a piece seems inclined to fall off. Upon the whole, it is nearly in the state in which it was left at the period of its formation.

11. "The rock is dark-brown in colour, except about ten feet from the bottom, which is discoloured by the annual rise of the water to that or a greater height. On the left side of the island we have a good view of the mass of water which causes one of the columns of vapour to ascend, as it leaps quite clear of the rock, and forms a thick, unbroken fleece all the way to the bottom. Its whiteness gave the idea of snow. As it broke into (if I may use the term) pieces of water all rushing on in the

same direction, each gave off several rays of foam, exactly as bits of steel, when burned in oxygen gas, give off rays of sparks. The snow-white sheet seemed like myriads of small comets rushing on in one direction, each of which left behind its nucleus of foam.



12. "In a word, the Victoria Cataracts are one of the most astonishing things in the world. Even at low water a liquid sheet, 800 feet in breadth, falls to the right of Garden Island. Add to this the columns of smoke suspended above the falling waters; the sun playing amongst them like a prism, and crowning them with a rainbow; and you will have some idea of a sight worthy of being seen. There are few on our globe worthy of comparison with the Falls of Victoria."

Zambesi, a great river which drains the south-eastern part of Africa. It empties itself into the Mozambique Channel, a part of the Indian Ocean.

adventurous, bold and daring.

cataraot, waterfall.

vapour, minute particles of water, as steam.

appropriately, fitly.

simulate, resemble.

adorned, beautified.

sylvan, woody.

physiognomy, peculiar look.

baobab, one of the largest known trees, its trunk being sometimes not less than thirty feet in diameter.

depicted, pictured.

hieroglyphic, picture writing, i.e.

the art of writing by means of small pictures. Invented and used by the ancient Egyptians.

assume, take.

landscape, a portion of country

that the eye can take in at a glance.

rapids, a series of small waterfalls.

eddies, little currents of water.

problem, a question involving doubt.

compressed, pressed together.

basaltic rock, a geological term applied to rocks that have been formed by submarine volcanic agency.

prolonged, lengthened out.

gigantic, very large.

perpendicular, upright.

homogeneous, having the same nature.

serrated, notched like a saw.

oxygen gas, one of the constituents of water and air. It is a great supporter of combustion, and articles burnt in it give off a brilliant light.

myriads, immense numbers.

nucleus, central part.

Where is the river Zambesi situated? Into what ocean does its waters flow? Name the two travellers who explored this river and discovered the falls. What name did they give to the falls? Describe the appearance of the waterfall from a distance. What did the natives call the watery vapour that ascends from the falls, and what did they say of it? What great trees were found in the neighbourhood, and what English trees did some of them resemble?

STANLEY'S SEARCH FOR LIVINGSTONE.

1. On the second day after Stanley's arrival in the capital of Unyanyembe, the Arab magnates of Tabora came to congratulate him. Tabora is the principal Arab settlement in Central Africa, with a population of about

5000. The Arabs were fine handsome men, mostly from Oman, and each had a large retinue of servants with him. After having exchanged the usual stock of congratulations, Stanley accepted an invitation to return the visit at Tabora, and three days afterwards, accompanied by eighteen bravely dressed soldiers; he was presented to a group of stately Arabs in long white dresses and jaunty caps of showy white, and introduced to the hospitalities of Tabora.

2. On the 20th of September the American flag was again hoisted, and the caravan, consisting of fifty-four persons, started along the southern route towards Ujiji and Livingstone. It moved forward through illimitable forests stretched in grand waves beyond the ken of vision; ridges, forest-clad, rising gently, one above another, until they receded in the purple blue distance, through a leafy ocean, where was only an indistinct outline of a hill far away. Stanley next passed through a grand and noble expanse of grass land, which was one of the finest scenes he had witnessed since leaving the coast. Great herds of buffalo, zebra, giraffe, and antelopes course through the plain, and the expedition indulged in a day or two of hunting. While crossing a river at this point, Stanley narrowly escaped being devoured by a crocodile, but little recked the danger, led on by the excitement of stalking wild boars and shooting buffalo cows.

3. Now from time to time Stanley heard from passing savages occasional rumours of the presence of white men at various points. This encouraged him to believe that Livingstone was not far off, and gave the necessary boldness to traverse the great wilderness beyond Marara, the transit of which he was warned would occupy nine days. The negroes became enthusiastic at the prospect of their journey's end. They therefore boldly turned their faces

north and marched for the Malagarazi, a large river flowing from the east to Lake Tanganyika. One of the exciting episodes of the journey was a boar-hunt, in which Stanley had a narrow escape from an ignominious death. In one of the forests through which he passed, he encountered a huge boar; and after provoking him with bullets, and shooting him, found that his formidable antagonist still had strength to charge furiously upon him. But Stanley, by placing his snow-white Indian helmet at the foot of a tree, and enticing the boar to rush at it, managed to escape.

4. On the 1st of November they arrived at the long-looked-for river, and, after crossing the ferry, they met a caravan coming from the interior, and were told that a white man had just arrived at Ujiji.

"A white man!" cried Stanley.

"Yes, an old white man with white hair on his face, and he was sick."

"Where did he come from?"

"From a very far country indeed."

"Where was he—stopping at Ujiji?"

"Yes."

"And was he ever at Ujiji before?"

"Yes; he went away a long time ago."

"Hurrah!" said Stanley; "this must be Livingstone."

5. He determined to hasten forward at all hazards. The caravan arrived on the 8th of November at the Rugufu river, at which point they could distinctly hear the thunders from the mysterious torrents which rolled into the cavernous recesses of Kabogo Mountain, on the further side of Lake Tanganyika. This noise gave Stanley the heartiest joy, because he knew that he was only forty-six miles from Ujiji and possibly Livingstone.

6. About mid-day on the 9th of November they reached

a picturesque and sequestered series of valleys, where wild fruit-trees grew, and rare flowers blossomed. On this day they caught sight of the hills from which Lake Tanganyika could be seen. Stanley ordered his boy, Selim, to furbish up his tattered travelling suits, that he might make as good an appearance as possible.

7. On the 236th day from Bagamoyo, and the 51st day from Unyanyembe, they saw the Lake of Tanganyika spread out before them, and around it the great blue-black mountains of Ugoma and Ukaramba. It was an immense broad sheet—a burnished bed of silver—a lucid canopy of blue above, lofty mountains for its valances, and palm-forests for its fringes. Descending the western slope of the mountain, the port of Ujiji lay below, embowered in palms.

8. “Unfurl your flags and load your guns!” cried Stanley.

“Ay wallah, ay wallah, bana!” eagerly responded the men.

“One, two, three!” and a volley from fifty muskets woke up the peaceful village below. The American flag was raised aloft once more; the men stepped out bravely as the crowds of villagers came flocking around them, shouting *Bindera Merikani!*—an American flag!

9. Suddenly Stanley heard a voice on his right say in English, “Good morning, sir.” A black man, dressed in a long white shirt, announced himself as “Susi,” the servant of Dr. Livingstone.

“What! Is Dr. Livingstone here?”

“Yes, sir.”

“In the village?”

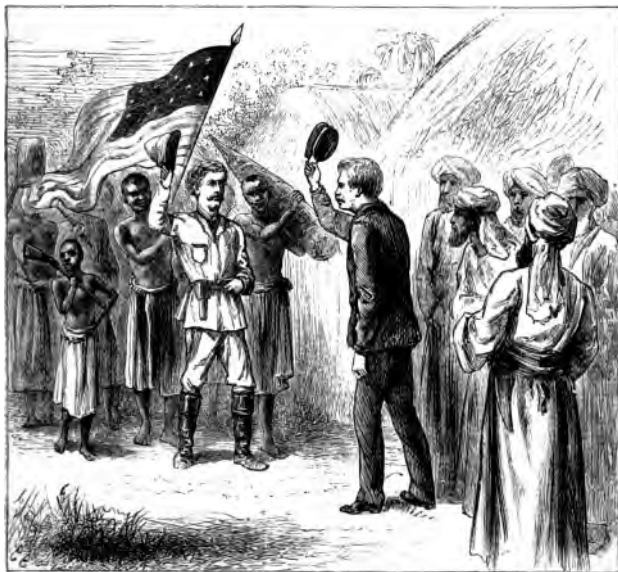
“Yes, sir.”

“Are you sure?”

“Sure, sure, sir. Why, I leave him just now.”

Then another servant introduced himself; the crowds flocked around anew; and finally, at the head of his caravan, Stanley found himself before a semicircle of Arab magnates, in front of whom stood an old white man with a gray beard.

10. As Stanley advanced toward him, he noticed that he was pale, looked wearied, had on his head a bluish cap



with a faded gold band around it, a red-sleeved waistcoat, and a pair of gray tweed trousers. He walked to him, took off his hat, and said, "Dr. Livingstone, I presume."

"Yes," said he, with a smile, lifting his cap slightly.

Then they clasped hands, and, after the necessary formalities with the Arab magnates, Stanley explained himself and his mission.

11. It was a great day for the old explorer. There were letters from his children. "Ah!" he said patiently, "I have waited years for letters." And you may picture for yourselves that strangely-met pair seated in the explorer's house, Livingstone hearing for the first time of the great changes in Europe. They sat long together, with their faces turned eastward, noting the dark shadows creeping up above the grove of palms beyond the village, and the rampart of mountains; listening to the sonorous thunder of the surf of the Tanganyika, and to the dreamy chorus which the night-insects sang.

12. Mr. Stanley remained four months in the company of Dr. Livingstone, during which time an intimate and rich friendship grew up between the two men. From November 10, 1871, until March 14, 1872, the men were daily together. Dr. Livingstone had been in Africa since March, 1866. He left Zanzibar in April of that year for the interior, with thirty men, and worked studiously at his high mission of correcting the errors of former travellers until early in 1869, when he arrived at Ujiji and took a brief rest. He had been deserted in the most cowardly manner by the majority of his followers, and was much of the time in want. At the end of June, 1869, he went on to the lake into which the Lualaba ran, and then was compelled to return the weary distance of 700 miles to Ujiji. The magnificent result of his labours, both in the interest of science and humanity, are now known to all the world.

13. Livingstone returned with Stanley to Unyanyembe, and on the 14th of March the two men parted, not without tears. It was not until sunset on the 6th of May that the worn and fatigued Stanley re-entered Bagamoyo. The next morning he crossed to Zanzibar, and thence as soon as possible departed for Europe with his precious

freight, the Livingstone journals and letters, and his own rich experience.—*Edward King.*

Unyamwebe, between Lake Tanganyika and the coast.

magnates, leading people.

Oman, a principality of Arabia, near the Persian Gulf.

retinue, followers, attendants.

Ujiji, on the east coast of Tanganyika, a lake 300 miles long, between 30 and 40 broad.

illimitable, boundless.

ken, reach of sight.

episodes, incidents in a connected story.

ignominious, without any glory.

formidable antagonist, dreadful opponent.

picturesque, strikingly beautiful.

sequestered, retired.

lucid canopy, clear, bright covering.

embowered, covered in or sheltered.

sonorous, loud sounding.

Bagamoyo, on the mainland, 25 miles from Zanzibar.

Zanzibar, an island just off the east coast of Africa.

How was Stanley received at Tabora? What narrow escapes had Stanley? Where did Stanley receive the first intelligence of Livingstone? Describe the first sight of Lake Tanganyika and Ujiji. Describe his entrance into Ujiji. What did Stanley bring for Livingstone? How long did Stanley remain with Livingstone? What precious freight did Stanley bring back to Europe?

[For a sketch of Dr. Livingstone's early life see *Fourth Reader*, p. 278. H. M. Stanley had been sent out by Mr. Bennett, the proprietor of the *New York Herald* newspaper, for the express purpose of finding Livingstone.]

CARDINAL WOLSEY TO CROMWELL.

FROM HENRY VIII.

Thus far hear me, Cromwell;
And—when I am forgotten, as I shall be,
And sleep in dull cold marble, where no mention
Of me more must be heard of—say, I taught thee,
Say, Wolsey—that once trod the ways of glory,
And sounded all the depths and shoals of honour—

Found thee a way, out of his wreck, to rise in;
 A sure and safe one, though thy master miss'd it.
 Mark but my fall, and that that ruined me.
 Cromwell, I charge thee, fling away ambition;
 By that sin fell the angels; how can man, then,
 The image of his Maker, hope to win by it?
 Love thyself last: cherish those hearts that hate thee;
 Corruption wins not more than honesty.
 Still in thy right hand carry gentle peace,
 To silence envious tongues. Be just, and fear not;
 Let all the ends thou aim'st at, be thy country's,
 Thy God's, and truth's. Then, if thou fall'st, O Crom-
 well,
 Thou fall'st a blessed martyr. Serve the king,
 And—pr'ythee lead me in;
 There take an inventory of all I have,
 To the last penny, 'tis the king's: my robe,
 And my integrity to Heaven, is all
 I dare now call mine own. O Cromwell, Cromwell!
 Had I but serv'd my God with half the zeal
 I served my king, he would not in mine age
 Have left me naked to mine enemies.

—*Shakespeare.*

William Shakespeare, England's greatest dramatic poet, was born at Stratford-on-Avon, in the year 1564. Very little is known of his early life. After his marriage he left Stratford and went to live in London, where he set up as an actor and writer of plays. He wrote thirty-seven plays and numerous poems, and after amassing considerable wealth, retired to Stratford-on-Avon to spend the remainder of his life. He died in 1616, and was buried in Stratford Church.

His best-known plays are Hamlet, Macbeth, The Merchant of Venice, Othello, and Richard III.

Wolsey, a cardinal who lived in the reign of Henry VIII. He was the son of a butcher at Ipswich, and was sent to Oxford at an early age. Here he distinguished himself by his learning and abilities. He afterwards entered the church, and rose rapidly in influence and position. Being brought under

the notice of the king, he became a great favourite, and was soon promoted to some of the chief offices in the kingdom. He amassed immense wealth, and built Christ Church College, Oxford, and Hampton Court Palace, near London. Falling under the king's displeasure, he was arrested at

York, and while being conveyed to the Tower, died at Leicester in the year 1530. **Thomas Cromwell**, secretary to Cardinal Wolsey. He afterwards became Earl of Essex, but falling under the displeasure of King Henry VIII., was beheaded on Tower Hill in 1540.

ECONOMY.—PART I.

1. Industry, knowledge, and skill are indispensable to the production of an abundance of the necessities and comforts of life; but the production of the necessities and comforts of life is not the ultimate object of man in applying his labour. He produces to enjoy; and to enjoy he must not only produce, but he must possess in such a way as always to have the means of satisfying his wants and gratifying his tastes.

2. The wants of man may be said to require an incessant supply of the products of industry. He wants clothing always; shelter must ever be accessible; and his recurring appetite calls for a supply of food three or four times a day throughout the year.

3. In most parts of the globe there is but one harvest of corn each year, and corn forms by far the larger part of man's food. During some months of the year the earth may be said to hold its producing power in suspense. If, then, man's wants are continuous, and his capacity to produce intermittent, it is clear, in order to possess at all times the means of satisfying his wants, that he must do something more than labour—he must save. By exercising his power of self-restraint, he must make

one harvest supply the cravings of three or four appetites, recurring three hundred and sixty-five times during the year.

4. Yet more care for the future is needed. Harvests are often deficient,—sometimes very deficient, and several weeks later than usual. To secure an uninterrupted supply, accordingly, there must be saving, not only from one harvest to another, but saving sufficient to provide against danger from the lateness and deficiency of future harvests.

5. The necessity of saving, or of refraining from the immediate consumption of what has been produced, is equally manifest in regard to almost every vegetable and animal substance upon which man habitually exercises his industry in order to supply his wants. The various roots which have been selected as articles of food are greatly affected by the vicissitudes of the season. These same vicissitudes act upon animal life, and upon the vegetable food which sustains that life.

6. The reasons here presented for self-restraint, or saving, are consequent upon the intermittent and uncertain yield of the substances to the production of which man directs his labour. But when to the infirmities of the seasons we add his own, the necessity of saving is seen to be still stronger. The prostration and decay of power during illness and old age, while they incapacitate for labour, do not make a supply of the products of industry less needful; and this supply, to meet the wants of illness and old age, is not obtainable except from the savings of what health and youth have produced.

7. If it could be thought a satisfactory mode of providing for the wants of the sick and aged, to charge the healthy and young with the supply of their wants, the call for *self-restraint* or saving would not be the less needful.

We should merely have to decide whether it would be more conducive to the general welfare that each individual should feel himself bound to provide by saving for his own wants during sickness and old age, or that, while he transferred to others the duty of supplying these wants, he should take upon himself the supply of theirs.

s. More than enough is presented in these considerations to satisfy us how indispensable a habit of saving is to the well-being of individuals and communities. But there are others which ought not to be passed over without some notice. The productiveness that industry has acquired, by calling in the assistance of knowledge and skill, has been already remarked upon. Let us name merely a few of the material forms which their combined forces have assumed—docks, railways, canals, and all descriptions of steam machinery. Without saving, such constructions would have been impossible. Their very cost is to be measured by the quantity of the saving from the products of previous labour consumed in their formation; their usefulness by the quantity of the necessities and comforts of life which they enable man to produce, compared with the quantity which he consented to set aside, in order to construct them.

industry, diligence in work.
knowledge, learning.
skill, familiar knowledge.
indispensable, absolutely necessary.
necessaries, things needful.
ultimate, last or chief.
incessant, continuous.
accessible, easy to get at.
recurring, returning.
suspense, stoppage for a time.
intermittent, irregular.
restraint, the act of holding back.

deficient, failing.
habitually, usually.
vicissitudes, changes.
infirmities, failings.
prostration, depression.
incapacitate, disable.
conducive, leading to.
transferred, conveyed.
considerations, suggestions, thoughts.
communities, people of a town or district.
acquired, obtained.

What three things are indispensable to the production of the necessities and comforts of life? What is industry? What is knowledge? What is skill? What is the chief object of man in applying labour? How does man make the produce of the land, which he is only able to obtain for a few months in the year, last him the twelve months? What power of mind does he exercise? How does he acquire an uninterrupted supply? What affects his food supply? How ought man to provide for sickness or old age? What habit, therefore, is necessary to the well-being of individuals and communities?

ECONOMY.—PART II.

1. If to save be essential to the accumulation of that abundance of the necessities and comforts of life, without which no country can be either densely or happily peopled—if even existence without saving be impossible in most countries—we may be asked how it happens that there are so many who do not save and never have saved, and yet exist. The answer is obvious—they subsist upon what others have saved. How they become possessed of other people's savings shall be examined into presently. Meanwhile, the fact of their existing without any savings of their own is not at all in contradiction with what we are compelled to receive as a condition of existence.

2. It is not affirmed that every man must save, in order that every man may exist; but it is affirmed that the aggregate number of people in existence cannot but depend upon the aggregate savings—in other words, upon the quantity of the necessities and comforts of life prepared for their sustenance. If nobody saved, in most regions of the earth nobody could live; and the larger number of those who do not save, the larger must be the *savings* of those who do save.

3. With saving as with working, a large portion of mankind, the very young and the impotent, cannot save. There are others, besides, whose habits are such that they cannot bring themselves to practise the abstinence from immediate consumption which constitutes saving. They cannot bring themselves to do what all intelligent people know to be essential to individual happiness and to the welfare of society, and what all well-disposed people feel it to be their duty to do.

4. This perversity of conduct, so far as it does not originate in a deficiency of intellect, indicates want of knowledge and misdirection of habits; and as knowledge and good habits do not come of themselves, but are the result, in a great measure, of adult effort in behalf of infancy and childhood, we may safely affirm that deficiency in respect of either is very often attributable to neglect of industrial teaching and industrial training.

5. The extent to which teaching and training can create habits of saving or self-denial will be seen, by comparing the conduct of any one who would pass as a fair sample of a well-informed and prudent man with that of an untutored savage. Place them in situations where each of them has food enough for six months, but no certainty of being able to procure more during the following six months. The knowledge and habits of the former would lead him, under such circumstances, to put himself upon half allowance at once.

6. The ignorance and unbridled appetite of the latter would induce him to spare nothing. Further than this, the estimate of the future makes up so much of the prudent man's present enjoyment, that to compel him to consume during six months what he knows ought to serve for twelve, would make him miserable. Whereas, nothing short of compulsion, of forcible curtailment of

his present enjoyment, would suffice to save the untutored savage from future starvation.

7. When a man has acquired the habit of saving, of being constantly prepared to forego a present indulgence for the sake of a greater future enjoyment, or to ward off future suffering, or when the habit is exercised as a means of providing some implement to augment the productiveness of his industrial efforts, we call him a **saving** or **economical** man, and we say that he possesses the quality of **economy**.

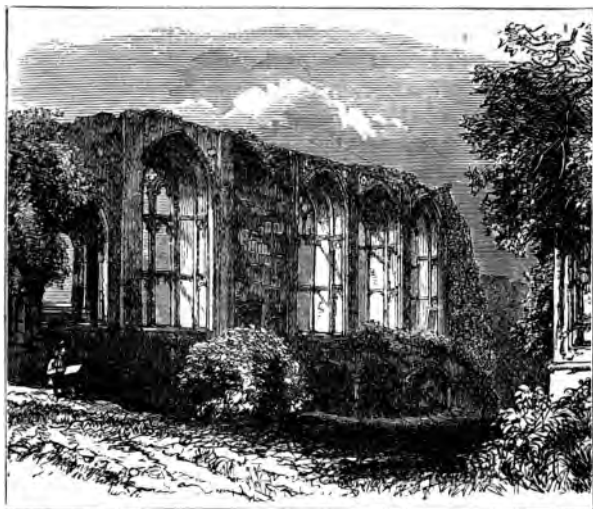
8. We can have no hesitation in enumerating this quality among the virtues, inasmuch as its prevalence is indispensable for individual and national well-being; and also among the conditions of industrial success, since, without its aid, industry, knowledge, and skill will be comparatively powerless.

accumulation, heaping up.
affirmed, stated as a fact.
aggregate, total.
impotent, feeble.
abstinence, refraining from.
perversity, obstinacy.
attributable, owing to.

unbridled, unchecked.
curtailment, shortening.
augment, increase.
economical, careful.
enumerating, numbering.
indispensable, absolutely necessary.

What is it necessary to do if we wish to have an abundance of the necessities and comforts of life? How do people live who do not work, and who have never saved? In some countries, if nobody saved, what would happen? What part of the community cannot save? What is often the cause of people not saving? Why is it necessary to save? What qualities would be powerless without this virtue?





TO THE IVY.

In the mythology of ancient Greece and Rome, the ivy was sacred to Bacchus, the god of wine. Along with the vine leaf it was twined round the staff or *thyrsus*, which was carried in the sacred processions by the priests of Bacchus.

1. Oh! how could fancy crown with *thee*
 In ancient days, the god of wine,
 And bid thee at the banquet be
 Companion of the vine?
Thy home, wild plant, is where each sound
 Of revelry hath long been o'er;
 Where song's full notes once pealed around,
 But now are heard no more.

2. The Roman, on his battle-plains,
Where kings before his eagles bent,
Entwined thee with exulting strains,
Around the victor's tent;
Yet there, though fresh in glossy green,
Triumphally thy boughs might wave,
Better thou lov'st the silent scene,
Around the victor's grave.
3. Where sleep the sons of ages flown,
The bards and heroes of the past; --
Where through the halls of glory gone
Murmurs the wintry blast; --
Where years are hastening to efface
Each record of the grand and fair; --
Thou, in thy solitary grace,
Wreath of the tomb! art there.
4. Thou o'er the shrines of fallen gods,
On classic plains dost mantling spread,
And veil the desolate abodes
And cities of the dead;
Deserted palaces of kings, --
Arches of triumph long o'erthrown, --
And all once-glorious earthly things,
At length are thine alone.
5. Oh! many a temple, once sublime,
Beneath a blue Italian sky,
Hath nought of beauty left by time,
Save thy wild tapestry!
And reared midst crags and clouds, 'tis thine
To wave where banners waved of yore,
O'er mouldering towers by lovely Rhine
Cresting the rocky shore.

6. High from the fields of air, look down
 Those eyries of a vanished race,
 Homes of the mighty, whose renown
 Hath passed, and left no trace;
 But thou art there!—Thy foliage bright,
 Unchanged, the mountain storm can brave,—
 Thou that wilt climb the loftiest height,
 And deck the humblest grave.
7. The breathing forms of Parian stone,
 That rise round grandeur's marble halls,—
 The vivid hues by painting thrown,
 Rich o'er the glowing walls,—
 The acanthus on Corinthian fanes,
 In sculptured beauty waving fair;
 These perish all—and what remains?
 Thou—thou alone art there!
8. 'Tis still the same—where'er we tread,
 The wrecks of human power we see;
 The marvels of all ages fled,
 Left to decay and thee!
 And still let man his fabrics rear,—
 August in beauty, grace, and strength,
 Days pass, thou Ivy never sere,
 And all is thine at length! —*Mrs. Hemans.*

revelry, riotous feasting.

eagles. A representation of an eagle formed the standard of the Romans. Eagles = standards = armies.

mantling, covering over, like a mantle.

tapestry, a kind of woven hanging once used as an inner covering for the walls of houses.

yore, olden times, many years ago.

eyries, nests as of eagles or hawks.

Parian stone, a beautiful marble from the island of Paros in the Archipelago.

acanthus, the leaf of a plant always sculptured on the tops or capitals of pillars of the Corinthian order of architecture.

fanés, temples.
august, noble.

ANECDOTE OF SIR MATTHEW HALE.

1. A gentleman, who possessed an estate of about five hundred pounds a year in the eastern part of England, had two sons. The elder, being of a rambling disposition, went abroad. After several years his father died; when the younger son, destroying the will that had been made in his elder brother's favour, seized upon the estate. He gave out that his elder brother was dead, and bribed false witnesses to attest the truth of this report.

2. In the course of time the elder brother returned, but being in destitute circumstances, found it difficult to establish his claims. At length he met with a lawyer who interested himself in his cause so far as to consult the first judge of the age, Sir Matthew Hale, Lord Chief-justice, in regard to it. The judge satisfied himself as to the justice of the claims of the elder brother, and then promised his assistance.

3. The cause was tried at Chelmsford, in Essex. On the appointed day, Sir Matthew Hale disguised himself in the clothes of an honest miller whom he had met on his way, and, thus equipped, entered the county hall where the cause was to be tried. Here he found out the plaintiff, and, entering into conversation with him, inquired what were his prospects; to which the plaintiff replied, "My cause is in a very precarious situation, and if I lose it, I am ruined for life."

4. "Well, honest friend," replied the pretended miller, "will you take my advice? Every Englishman has the right and privilege to take exception to any one jurymen through the whole twelve; now, do you insist upon your privilege, without giving a reason why, and, if possible, get me chosen in place of some one whom you shall

challenge, and I will do you all the service in my power."

5. The plaintiff shook the pretended miller by the hand, and promised to follow his advice; and so, when the clerk called over the names of the jurymen, he objected to one of them. The judge on the bench was much offended at this liberty. "What do you mean," he asked, "by taking exception to that gentleman?" "I mean, my lord," said the plaintiff, "to assert my privilege as an Englishman, without giving a reason why."

6. The judge had been highly bribed, and in order to conceal it by a show of candour, and having confidence in the superiority of his party, he said, "Well, sir, whom would you wish to have in place of him you have challenged?" After a short time spent in looking round upon the audience, "My lord," said the plaintiff, "I will choose yonder miller, if you please." Accordingly the supposed miller was directed to take his place on the jury.

7. As soon as the clerk of the court had administered the usual oath to all, a little dexterous fellow came into the apartment and slipped ten golden guineas into the hand of every one of the jurymen except the miller, to whom he gave but five. "How much have you got?" whispered the miller to his next neighbour.

"Ten pieces," said the latter. The miller said nothing; the cause was opened by the plaintiff's counsel, and all the scraps of evidence that could be adduced in his favour were brought forward.

8. The younger brother was provided with a great number of witnesses, and pleaders, all plentifully bribed like the judge. The witnesses deposed that they were in the same country where the brother died, and had seen the burial of his mortal remains. The counsellors pleaded upon this accumulated evidence, and everything

went with a full tide in favour of the younger brother. The judge summed up the evidence with great gravity and deliberation, "And now, gentlemen of the jury," said he, "lay your heads together, and bring in your verdict as you shall deem just."

9. They waited but a few minutes; and then supposing that all were determined in favour of the younger brother, the judge said, "Gentlemen, are you all agreed? and who shall speak for you?"—"We are, I believe, all agreed," replied one, "our foreman shall speak for us." "Hold, my lord," replied the miller, "we are not all agreed." "Why?" said the judge, in a very surly tone, "what's the matter with you? What reasons have you for disagreeing?"

10. "I have several reasons, my lord," replied the miller. "The first is, they have given to all these gentlemen of the jury ten broad pieces of gold, and to me but five, which, you know, is not fair. Besides, I have many objections to make to the false reasonings of the pleaders, and the contradictory evidence of the witnesses." Upon this, the miller began a discourse, which discovered such penetration of judgment, such a knowledge of law, and was expressed with such manly and energetic eloquence, that it astonished the judge and the whole court.

11. As the speaker was going on with his powerful demonstrations, the judge, in great surprise, stopped him. "Where did you come from, and who are you?"—"I came from Westminster Hall," replied the miller, "my name is Matthew Hale, I am Lord Chief-justice of the King's Bench. I have observed the iniquity of your proceedings this day, therefore come down from a seat which you are nowise worthy to hold. You are one of the corrupt parties in this nefarious business. I will come up this moment and try the cause over again."

12. Accordingly, Sir Matthew went up, with his miller's dress and hat on, began the trial anew, and subjected the testimony to the most searching scrutiny. He made the elder brother's title to the estate clear and manifest from the contradictory evidence of the witnesses, and the



false reasoning of the pleaders; unravelled all the sophistry of the latter to the very bottom, and gained a complete victory in favour of truth and justice.

Sir Matthew Hale was born at Alderley, in Gloucestershire, 1609. He was left an orphan at an early age, and

intended to devote himself to a military life. This intention was happily frustrated, and at twenty years of age he devoted himself to the law. He soon rose to eminence, and was engaged as counsel in the trials of Strafford, Archbishop Laud, and of King Charles I. In the year of the Restoration, 1660, he was appointed chief-baron of the exchequer, and in 1671 he was promoted to the chief-justiceship of the King's Bench. He was obliged by ill-health to resign in 1675, and died on Christmas-day, 1676.

In an age of general corruption he was upright and impartial.

Cowper, in his *Tusk*, speaking of Sir M. Hale, says:—

“Immortal Hale! for deep discernment praised
And sound integrity, not more than famed
For sanctity of manners undefiled.”

attest, bear witness to.
equipped, dressed.

plaintiff, the person who commences an action before a tribunal for the recovery of a claim.

precarious, dangerous.
to take exception, to object.

candour, fairness.
audience, the listeners.
dexterous, clever.

plaintiff's counsel, the one appointed to plead his cause.
adduced, brought forward.
pleaders, those who argue or reason in support of a claim.
deposed, swore on oath.

accumulated, heaped up.
summed up, put both sides of the case before the jury.

verdict, pronounced opinion.
penetration of judgment, power by which the mind sees through anything difficult.

Westminster Hall, the court where Sir M. Hale presided.
iniquity, injustice, wickedness.
nefarious, wicked.

testimony, evidence.
unravelled, cleared up.
sophistry, clever but deceitful arguments.
frustrated, hindered.
discernment, insight.

Explain the causes of the action at law described in the foregoing. Who was Sir Matthew Hale? How did he contrive to get placed among the jury? On what grounds did he differ from the other jurymen? How was the case settled?

SIR MATTHEW HALE'S PRACTICAL
PRECEPTS.

1. Never speak anything for a truth which you know or believe to be false. Lying is a great sin against God, who gave us a tongue to speak truths, and not falsehoods. It is a great offence against humanity itself; for where there is no regard to truth, there can be no safe society between man and man.

2. And it is an injury to the speaker; for, besides the disgrace which it brings upon him, it occasions so much baseness of mind that he can scarcely tell truth, or avoid lying even when he has no colour of necessity for it; and, in time, he comes to such a pass that, as other people cannot believe he speaks truth, so he himself scarcely knows when he tells a falsehood.

3. You must not equivocate, nor speak anything positively for which you have no authority but report, or conjecture, or opinion. Let your words be few, especially when your superiors or strangers are present, lest you betray your own weakness, and rob yourself of the opportunity which you might otherwise have had, to gain knowledge, wisdom, and experience, by hearing those whom you silence by your impertinent talking.

4. Be not too earnest, loud, or violent in your conversation. Silence your opponent with reason, not with noise. Be careful not to interrupt another when he is speaking. Hear him out, and you will understand him the better, and be able to give him the better answer.

5. Consider before you speak, especially when the business is of moment; weigh the sense of what you mean to utter, and the expressions you intend to use, that they may be significant, to the point, and inoffensive.

Inconsiderate persons do not think till they speak; or they speak, and then think.

6. Some men excel in one thing, some in another. In conversation learn, as near as you can, where the skill or excellence of any person lies; put him upon talking on that subject, observe what he says, keep it in your memory, or commit it to writing. By this means you will glean knowledge from every one with whom you converse, and at an easy rate acquire what may be of use to you on many occasions.

7. When you are in company with light, vain, impertinent persons, let the observing of their failings make you the more cautious both in your conversation with them and in your general behaviour, that you may avoid their errors.

8. If any one, whom you do not know to be a person of truth, sobriety, and weight, relates strange stories, be not too ready to believe or report them; and yet, unless he is one of your familiar acquaintances, be not too forward to contradict him.

9. If the occasion requires you to declare your opinion, do it modestly and gently, not bluntly nor coarsely; by this means you will avoid giving offence, or being abused for too much credulity.

equivocate, try to convey false impressions.

conjecture, supposition.

of moment, of consequence.

inconsiderate, thoughtless.

sobriety, seriousness.

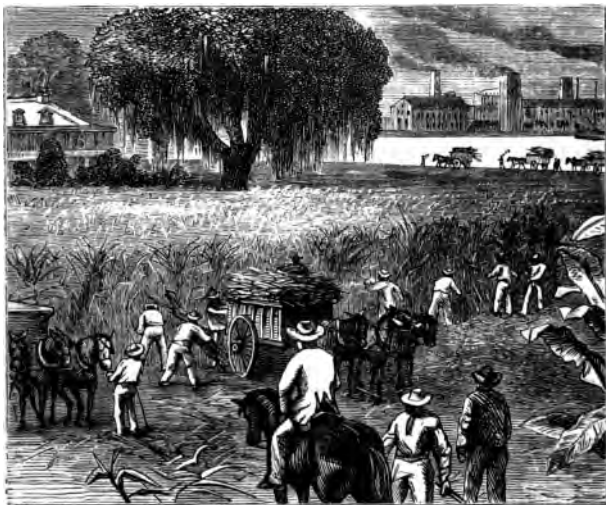
credulity, believing without good reasons.

Show on what three grounds lying is always wrong. What is the best way of silencing an opponent? What should you always do before you speak, especially on important matters? How may you gain knowledge from those with whom you converse? How should you act when in company with foolish persons? If a stranger repeat strange stories how should you act? How should you try to declare *your opinions*?

WEST INDIAN SCENERY.

1. As we landed from our boat, a truck was waiting for us on a tramway; and we scrambled ashore on a bed of rich black mud, to be received, of course, in true West Indian fashion, with all sorts of courtesies and kindnesses.

2. A long-legged mule, after gibbing enough to satisfy his own self-respect, condescended to trot off with us up



the tramway, which lay along a green drive strangely like one of the Cambridgeshire fens. But in the ditches grew a pea with large, yellow flower-spikes, which reminded us that we were not in England; and beyond the ditches rose on either side, not wheat and beans, but sugar-cane ten and twelve feet high. And a noble grass it is, with its stems as thick as one's wrist, tillering out below in bold curves over the well-hoed, dark soil, and

its broad, bright leaves falling and folding above in curves as bold as those of the stems; handsome enough thus, but more handsome still, I am told, when the "arrow," as the flower is called, spreads over the cane-piece a purple haze, which flickers in long shining waves before the breeze. One only fault it has; that from the luxuriance of its growth, no wind can pass through it, and that therefore the heat of a cane-field tract is utterly stifling.

3. Here and there we passed a still uncultivated spot; a desolate, reedy swamp, with pools and stunted alder-like trees, reminding us again of the Deep Fens, while the tall chimneys of the sugar-works, and the high woods beyond, completed the illusion.

4. Soon, however, we had a broad hint that we were not in the Fens, but in a tropic island. A window in heaven above was suddenly opened; out of it, without any warning, a bucket of warm water, happily clean, was emptied on each of our heads, and the next moment all was bright again. A thunder shower without a warning thunder-clap, was to me a new phenomenon which was repeated several times that day. The suddenness and the heaviness of the tropic showers is as amusing as it is trying. The umbrella or the waterproof must be always ready, or you will get wet through. And getting wet here is a much more serious matter than in a temperate climate, where you may ride or walk all day in wet clothes and take no harm; for the rapid radiation produced by the intense sunshine causes a chill which may beget, only too easily, fever and ague not to be as easily shaken off.

5. The cause of these rapid and heavy showers is simple enough. The trade-wind, at this season of the year, *is saturated* with steam from the ocean which it has

crossed, and the least disturbance in its temperature, from ascending hot air or descending cold, precipitates the steam in a sudden splash of water out of a cloud, if there happens to be one near; if not, out of the clear air. Therefore it is that these showers, when they occur in the daytime, are most common about noon; simply because then the streams of hot air rise most frequently and rapidly to struggle with the cooler layers aloft. There is thunder, of course, in the West Indies, continuous and terrible. But it occurs after midsummer, at the breaking up of the dry season and coming on of the wet.

6. At last the truck stopped at a manager's house with a palmiste, or cabbage-palm, on each side of the garden-gate,—a pair of columns which any prince would have longed for as ornaments for his lawn. It is the fashion here, and a good fashion it is, to leave the palmistes, a few at least, when the land is cleared; or to plant them near the house, merely on account of their wonderful beauty. One palmiste was pointed out to me in a field near the road which had been measured by its shadow at noon, and found to be one hundred and fifty-three feet in height. For more than a hundred feet the stem rose straight, smooth, and gray. Then three or four spathes of flowers, four or five feet long, jutted out in an upward direction, while from below them, as usual, one dead leaf, twenty feet long or more, dangled head downwards in the breeze. Above them rose, as always, the green portion of the stem for some twenty feet; and then the flat crown of feathers, as dark as yew, spread out against the blue sky, looking small enough up there, though forty feet at least in breadth.

7. And now we set ourselves to walk up to the depôt where the government timber was being felled, and

where the real "high woods" were to be seen at last. Our path lay along the half-finished tramway through the first cacao plantation I had ever seen, though I am happy to say by no means the last.

8. Imagine an orchard of nut-trees, with very large long leaves. Each tree is trained to a single stem. Among them, especially near the path, grew plants of the common hothouse datura, its long white flowers perfuming the air. They have been planted as landmarks to prevent the young cacao-trees being cut over when the weeds are cleared. Among them, too, at some twenty yards apart, are the stems of a tree looking much like an ash, save that it is inclined to throw out broad spurs. You look up and see that they are 50 or 60 feet high, throwing out one blaze of vermilion against the blue sky. Those who have stood under a Lombardy poplar in early spring, and noticed its buds and twigs showing like pink coral upon a blue ground, and have felt the beauty of the sight, can imagine faintly—but only faintly—the beauty of these cacao-mothers, as they call them here, because their shade is supposed to shelter the cacao-trees, while the dew collected by their leaves keeps the ground below always damp.

9. I turned my dazzled eyes down again, and looked into the delicious darkness under the bushes. The ground was brown with fallen leaves, or green with ferns; and here and there a slant ray of sunlight pierced through the shade, and flashed on the brown leaves, and on a gray stem, and on a crimson jewel which hung on the stem—and there again, on a bright orange one; and as my eye became accustomed to the darkness, I saw that the stems and larger boughs, far away into the wood, were dotted with pods, crimson or yellow or green, of *the size* of a small closed hand. These were the cacao

Pods, full of what are called at home cocoa-nibs. And there lay a heap of them, looking like a heap of gay flowers; and by them sat their brown owner picking them to pieces, and laying the seeds to dry on a cloth. I went up and told him that I came from England, and never saw cacao before, though I had been eating and drinking it all my life; at which news he laughed till his white teeth and eyeballs made a light in that dark place. He offered me a fresh broken pod that I might taste the pink, sour-sweet pulp in which the rows of nibs lie packed, a pulp which I found very pleasant and refreshing.

10. He dries his cacao nibs in the sun, and if he be a well-to-do and careful man, on a stage with wheels, which can be run into a little shed on the slightest shower of rain; picks them over and over, separating the better quality from the worse, and at last sends them down on mule-back to the sea, to be sold in London as Trinidad cocoa, or perhaps disposed of in Paris to the chocolate makers, who convert them into "Chocolat Menier," by mixing them with sugar and vanilla, both, possibly, from this very island.

11. This latter fact once inspired an adventurous German with the thought that he could make chocolate in Trinidad just as well as in Paris, and (so goes the story) he succeeded. But the fair Creoles would not buy it. It could not be good; it could not be the genuine article unless it had crossed the Atlantic twice, to and from that centre of fashion, Paris. So the manufacture, which might have added greatly to the wealth of Trinidad, was given up, and the ladies of the island eat nothing but French chocolate, costing, it is said, nearly four times as much as home-made chocolate need cost.

12. Now we left the cacao grove, and I was aware, on each side of the tract, of a wall of green, such as I had

never seen before on earth, not even in my dreams; strange colossal shapes towering up, 100 feet and more in height, which, alas! it was impossible to reach; for on either side of the trace were 50 yards of half-cleared ground, fallen logs, withes, huge stumps 10 feet high, charred and crumbling; and among them and over them a wilderness of creepers and shrubs, and all the luxuriant young growth of the "rastrajo," which springs up at once whenever the primeval forest is cleared—all utterly impassable. These rastrajo forms, of course, were all new to me, but I could not help remarking upon their tendency to grow enormous rounded leaves.

13. My first feeling on entering the high woods was one of helplessness, confusion, awe, almost terror. One is afraid at first to venture in 50 yards. Without a compass, or the landmark of some opening to or from which he can look, a man must be lost in the first ten minutes, such a sameness is there in the infinite variety. That sameness and variety make it impossible to give any general sketch of a forest. Once inside, "you cannot see the wood for the trees." You can only wander on as far as you dare, letting each object impress itself on your mind as it may, and carrying away a confused recollection of innumerable perpendicular lines, all straining upwards, in fierce competition, towards the light-food far above; and next of a green cloud, or rather mist, which hovers round your head, and rises, thickening and thickening, to an unknown height. The upward lines are of every possible thickness, and of almost every possible hue; what leaves they bear, being for the most part on the tips of the twigs, give a scattered, mist-like appearance to the under foliage.

14. For the first moment, therefore, the forest seems more open than an English wood. But try to walk

through it, and ten steps undeceive you. Around your knees are probably Mamures, with creeping stems and fan-shaped leaves, something like those of a young coconut palm. You try to brush through them, and are



caught up instantly by a string or wire belonging to some other plant. You look up and round; and then you find that the air is full of wires—that you are hung up in a net-work of fine branches belonging to half-a-dozen different sorts of young trees, and intermixed with as many different species of slender creepers. You then run against the huge leaf-stalk of a young Cocorite palm. This leaf is five-and-twenty feet long, and springs from

huge ostrich plume, which is sprawling out of the ground and up above your head a few yards off. Cutting through this leaf-stalk, you are again suddenly stopped by a gray lichen-covered bar as thick as your ankle. This entwines itself with three or four other bars, rolling over with them in great knots and festoons and loops twenty feet high, and then vanishing into the green cloud overhead, as if a giant had thrown a ship's cable into the tree tops.

15. At one of these loops, nearly as thick as your arm, your companion, if you have a forester with you, will spring joyfully. With a few blows of his cutlass he will sever it as high as he can reach, and again below, some three feet down; and while you are wondering at this seemingly wanton destruction, he lifts the bar on high, throws his head back, and pours down his thirsty throat a pint or more of pure cold water. This hidden treasure is, strange as it may seem, the ascending sap, or rather the ascending pure rain-water, which has been taken up by the roots, and is hurrying aloft, to be elaborated into sap, and leaf, and flower, and fruit, and fresh tissue for the very stem up which it originally climbed; and therefore it is that the woodman cuts the water-vine¹ through just at the top of the piece which he wants, and not at the bottom; for so rapid is the ascent of the sap that if he cut the stem below, the water would have all fled upwards before he could cut it off above.

16. Meanwhile the old story of *Jack and the Bean-stalk* comes into your mind. In such a forest was the old dame's hut; and up such a bean-stalk Jack climbed, to find a giant and a castle high above. The monkeys and the parrots, and the humming-birds and the flowers, and

¹ The name of this tree is the "Liantasee."

all the beauty, are up above the green cloud. You are in "the empty nave of the cathedral," and "the service is being celebrated aloft in the blazing roof."—*C. Kingsley*.¹

Trinidad, where this forest scenery was found, is one of the West India Islands. Columbus, who discovered it in 1498, gave it this name, from the Spanish word meaning the Trinity. It was surrendered to the British in 1797.

gibbing, being restive.
fens, marsh lands in the eastern counties.
tillering, sprouting.
haze, mist.
phenomenon, remarkable appearance.
radiation, throwing off heat.
saturated, thoroughly charged.
temperature, the heat of the atmosphere.

precipitates, throws down rapidly.
cacao, the cocoa-tree.
Chocolat Menier, a famous chocolate, so called from its manufacturer.
vanilla, a plant used for flavouring chocolate.
Creoles, descendants of Europeans born in the West Indies.
colossal, huge.

Describe the sugar-cane grass. Of what part of England was the author reminded, but with what striking difference? Explain the cause of sudden tropical showers. Describe the palmiste-tree. Describe a cacao plantation. What is done with the cacao nibs? Describe the experiment of the adventurous German. Describe the first feeling on entering the high woods. Explain how water can be obtained from the water-vine.

WINTER AT TORNEA, AND NORTHERN LIGHTS.

1. The town of Tornea, on the Gulf of Bothnia, at our arrival in the month of December, presented a most remarkable aspect. The little houses were buried to the roofs in snow, which, had there been clear daylight, must

¹ Extracted by permission of Messrs. Macmillan & Co., London.

have effectually shut it out; but the snow continually falling, or ready to fall, for the most part hid the sun during the few minutes he might have appeared at mid-day.

2. In the month of January the cold increased till Réaumur's mercurial thermometer, which at Paris in the severest frost only falls to 14° below the freezing point, here fell to 37° . The spirits of wine in the other thermometers was frozen. If we opened the door of a warm room, the external air rushing in, instantly converted all the vapour in it into snow, whirling it round in a white vortex. When we went out we felt as if the intense cold air were tearing our chests; and indoors, the wood of which the houses are built, was split by the violence of the frost.

3. The solitude of the streets was as great as if the people had been all dead. There are many people in this town who have lost an arm or a leg by the frost. The cold, which is always very great, sometimes increases so violently and suddenly as to be frequently fatal to those who are so unhappy as to be exposed to it.

4. The winds seem to blow from all quarters at once, driving the snow about with such fury that, in a few moments, all the roads are rendered invisible. The situation of a person surprised in the open country in such a storm is very dreadful; his knowledge of the roads, and even the marks afforded by the trees, avail him nothing; he is blinded by the snow, and, in his attempt to find his way home, is generally lost.

5. But though in this climate the earth is so cheerless, the heavens present the most magnificent aspects. The short days are no sooner closed, than fires of every colour and figure light up the sky, as if designed to compensate for the absence of the sun. These fires have not here as

in more southerly latitudes any constant situation, though a luminous arch is often seen fixed in the north, and lights seem more frequently to cover the whole extent of the sky.

6. Sometimes these lights begin in the form of a great scarf of bright light, with its ends upon the horizon, which glides swiftly up the sky with an appearance resembling a fishing-net. After these preludes all the lights unite in the zenith, and form the top of a kind of crown.

7. It would be endless to mention all the different figures these lights assume, and the various motions with which they are agitated. Their movement is most commonly like that of a pair of flags waved in the air, and the different tints of their light give them the appearance of so many vast streamers of changeable taffeta. Sometimes they line a part of the sky with scarlet.

8. On one of the days in December I saw a phenomenon that, in the midst of the wonders to which I was every day accustomed, excited my admiration. To the south a great space of the sky appeared tinged with so vivid a red that the constellation of Orion looked as if it had been steeped in blood. This light, which was at first fixed, soon moved, and changing into violet and blue, settled into a dome, the top of which stood a little to the south-west of the zenith. The moon shone brightly, but did not in the least efface it.

Northern Lights, called also Aurora Borealis, caused by discharges of electricity in a highly rarefied atmosphere.

Tornea, a town on the river Tornea, in Sweden.

Réaumur's mercurial thermo-

meter, used in Russia and Germany, in which the boiling point is 80°.

vortex, whirlwind.

designed, intended.

compensate, make amends.

luminous, full of light.

preludes, introductions.
zenith, the point in the sky over
 the head of the beholder.
taffeta, a dress material.

phenomenon, a remarkable ap-
 pearance.
constellation, cluster of fixed
 stars.

Describe the town of Tornea when visited by the writer. What effect had the cold on the thermometers? What happened if the door of a warm room were opened? How does the severe cold affect people? What is the appearance of the heavens in winter? How do the lights sometimes begin? What was the phenomenon seen in December?

THE AURÓRA BOREALIS.

Midnight hath told his hour: the moon, yet young,
 Hangs in the ardent west, her bow unstrung:
 Larger and fairer as her lustre fades,
 Sparkle the stars amidst the deepening shades;
 Jewels more rich than night's regalia gem
 The distant iceberg's spangled diadem;
 Like a new morn from orient darkness there
 Phosphoric splendours kindle in mid-air,
 As though from heaven's self-opening portals, came
 Legions of spirits in an orb of flame,—
 Flame that from every point an arrow sends,
 Far as the concave firmament extends:
 Spun with the tissue of a million lines,
 Glistening like gossamer, the welkin shines:
 The constellations in their pride look pale
 Through the quick trembling brilliance of that veil;
 Then suddenly converged, the meteors rush
 O'er the wide south; one deep vermilion blush
 O'erspreads Orion glaring on the flood,
 And rabid Sirius foams through fire and blood;
 Again the circuit of the pole they range,
 Motion and figure every moment change,

Through all the colours of the rainbow run,
Or blaze like wrecks of a dissolving sun;



While ether burns with glory, conflict, flight,
And the glad ocean dances in the light.—*Montgomery.*

ardent, burning.

regalia, ensigns of royalty such
as the crown and sceptre.

gossamer, thin cobweb.

welkin, sky.

Orion, a constellation.

Sirius, the dog-star.

ether, a refined air.

ABYSSINIAN WAR.

1. On the 19th of November, 1867, the British Parliament was summoned to meet, in order to authorize an expedition for setting free the English captives in Abyssinia, some of whom had been specially

accredited to King Theodore by the Queen's government. A vote of £4,000,000 was passed, and the invading force was ordered to proceed from Bombay. It consisted of an Anglo-Indian army under the command of Sir Robert Napier, whose scientific skill, experience, and great military reputation well qualified him for the task.

2. The troops were well provided in the commissariat, medical, and transport departments, and special arrangements were made for the probable difficulties of a campaign in a comparatively unknown and savage country. The army consisted of only 12,000 men; and though there was no doubt of its success, there was some fear that, driven to desperation, Theodore might murder the prisoners before the arrival of the invading force.

3. The British force left Bombay on the 21st of December, and early in the following month arrived at Zoulla, a small village on the bleak and inhospitable coast of the Red Sea, between Annesly Bay and the Abyssinian mountains. It had been ascertained by a reconnoitring party that had been despatched from Bombay in the previous September, that this was the best point for disembarking and for the base of subsequent military operations. This advanced party had found Zoulla to be the only place in which a supply of water could be obtained, and they at once set about constructing a pier on the sloping beach with iron girders and stout timber which had been sent on by steamers for the purpose. The stones used in the construction had to be obtained from Massowah and the neighbouring ports.

4. Sea-walls were thus constructed of stones and fascines till the pier extended 900 feet into the sea, with a depth of 5 feet for our vessels at low water. A road 50 feet wide was cleared through the jungle from the pier to the camping ground, a distance of $1\frac{1}{4}$ miles. The old village

wells were cleared out, twenty new ones constructed, and a water-shot 480 feet long was raised on trestles above the sea, for conveying distilled or condensed sea-water from the condensing apparatus on board the *Satellite*.

5. By the time the Anglo-Indian army arrived, another pile-pier had been commenced, and sheds had been constructed for the commissariat and other purposes. A complete military town, with comfortable quarters for the troops, had been established in an unfertile district which previously would not have afforded shelter or sustenance for a single company. In place of a barren beach and a comparatively unvisited creek, there was a harbour full of ships, a strand occupied by the various materials of war, and a crowd of men of almost every language and country. Depôts and stores of all kinds, steam-engines, tramways, guns, ammunition, forage, and various scientific appliances were to be seen there; and even the administration of the law was provided for in a building devoted to the purpose of a court of justice.

6. The whole scene was a triumph of modern energy and engineering skill. Horses, ponies, mules, and even elephants had been taken there for the transport service, and for the conveyance of heavy ordnance. The natives were astonished at these evidences of the enterprise and power of the invaders, whom they regarded as irresistible.

7. Theodore had encamped on the line of Magdala, the fortress to which he had retired, after unsuccessfully endeavouring to prevent the rebellion of the inhabitants of the surrounding country. A long distance, however, had to be traversed to reach him, and the route lay through provinces, the neutrality of which was by no means assured. To keep up communication with the magazines at Zoulla was therefore essential, since the

natives might refuse, or might be unable to provide, food and water in a country where there was scarcely sufficient sustenance for the scanty population. Fortunately a friendly relation had been maintained with the native chiefs and with the Turkish rulers of the Abyssinian seaboard.

8. Kassa, the prince of Tigre, the province along which the line of march was to be taken, visited the British camp in semi-barbarous state on the 25th of February, 1868, and after having been fêted and propitiated, pledged himself to become an ally.

9. Soon afterwards the troops set out, and reached the rough and terrible causeway of the Koomaylee Pass, the rocky barriers and dark defiles of which reached almost to Senafeh. The journey was frequently hindered by attacks made by the wild border tribes upon the muleteers and camp-followers. This predatory warfare lasted till the forces reached Attegrath and pushed on to Wadalah, where it was rumoured that Theodore had encamped. He was not there, however, when the troops reached the place on the 19th of March; he had already occupied the heights of Fahla, at the head of the Arogee Pass. After having made a toilsome ascent to a treeless plateau which stands 10,000 feet above the level of the sea, the three brigades forming the first division of the field force, and consisting of 4000 men, were concentrated into one line, and the march was directed to Magdala. Theodore was already in a desperate condition, half-maddened by frequent indulgence in ardent spirits, and rendered so ferocious that he was constantly venting his fury on victims who were ordered for execution. The European prisoners were sometimes ordered to his presence, as though to hear their own sentence. His great trust was in several *large guns* which he had ordered to be cast, and he con-

tinued to entertain a belief that they might be effectual to repel an attack on the fortress.

10. Meanwhile no attempt was made either to negotiate or to threaten, since one course might lead him to expect that the past would be condoned, while the other might so enrage him as to cause the immediate massacre of the prisoners.

11. On the 3d of April, however, Sir Robert Napier wrote to him to declare that by the command of the Queen the British force was approaching Magdala, to recover from his hands the Envoy Rassam, Consul Cameron, Dr. Blane, Lieutenant Prideaux, and the other European prisoners, and demanding that they should be sent to the English camp as soon as it was near enough for them to go in safety. The king was furious, and made no reply; whereupon Sir Robert, after issuing an address to the Mohammedan people of the neighbourhood, who were at war with Theodore, explaining the purpose of his expedition, prepared to attack the stronghold. A reward was offered for the capture of the king, and the chiefs were directed to close every avenue by which he might escape. On the 9th of April the British force reached the formidable mountain pass which alone separated them from Magdala. Four thousand feet beneath, the Basilho river rolled its waters to the Nile, and the tremendous gorge consisted of vast masses of rock and of broken mountains forming a chaotic and impenetrable barrier. Across this, however, Theodore had himself formerly had a road constructed—a mere gray thread amidst the rugged cliffs down which it led. Twelve miles beyond was Magdala, nearly concealed by gigantic mountains, an apparently impregnable fortress, which might have been defended even by skilful barbarians. To have invested it would have required an

army of 50,000 men, instead of the 4000 which formed the British force.

12 It was hoped that Theodore would offer battle. The troops descended the steep, and, after fording the river, began to climb the precipitous ascent of the table-



land. The firing of a cannon from the rampart of the mountain was a signal that Theodore meant fighting, and was hailed with a cheer from our men. About 5000 Abyssinians rushed down towards the ravine where our artillery was passing, probably mistaking the transport for one of treasures or stores, but the steel battery and rocket tubes were speedily removed from the backs of the mules and brought into action. The enemy was

astonished at the havoc made by the terrible discharge, and fled. Again and again they re-formed and returned, but the conflict was hopeless; and while our loss was one man killed and 20 wounded, 349 of the enemy lay on the field, and thirty of their wounded were carried to our field-hospital, where, to their astonishment, they were carefully tended.

13. Theodore, watching the battle from the heights, was amazed. He had drunk deeply on the previous day, had ordered a general execution of many of his people, and had killed some with his own hand, after which, however, he seems to have suffered remorse, for he was heard praying that his sin might be forgiven. All night he was in consternation, and sent for the Europeans to ask how the threatened calamity might be averted. They advised him to send a deputation to the British camp, and accordingly Lieutenant Prideaux, with two other captives and an Abyssinian chief, arrived before day-break at Sir Robert Napier's head-quarters. But they were charged with no specific message, and no reply could be given except a promise, that if Theodore delivered up the captives in person, and made due submission, he and all his family should have honourable treatment and protection. This written declaration was received by the king with indignation. He refused to surrender, and in a wild and almost incomprehensible letter, neither signed nor sealed, committed his subjects to the care of the invading force. He had, it seems, determined to die, and on the departure of the second mission, consisting of Lieutenant Prideaux and Mr. Flad, lay down, covered himself with his cotton sheets, and remained for an hour without moving. On rising from the ground he drew a pistol from his girdle, placed the muzzle to his mouth, and pulled the trigger. The weapon did not go off, but

an attendant struck it aside, and in the act it exploded, and the bullet, after slightly grazing his temple, buried itself in the ground. Regarding this as a token that he was to show mercy, he immediately ordered that the European captives should be conveyed to the British camp, and Mr. Flad and Lieutenant Prideaux, who were returning disconsolately, were gladdened by the sight of their liberated companions on their way to the general's tent.

14. Thus one great object of the expedition was achieved, but the submission of the tyrant remained to be secured. He had withdrawn himself to the fortress of Magdala, and it was necessary to make an advance upon this last stronghold. Before daybreak, however, the king attempted an escape from that fortress with the best part of his forces, by way of the Kafirbar Gate.

15. The sight of the Galla tribe, who had been appointed by Sir Robert Napier to watch the outlets and who occupied the neighbouring hill-tops, convinced him that this was impossible, and, finding that only death or submission remained, he ordered such of his soldiers as were unwilling to share his fate to leave him and seek their own safety; he sallied forth in face of the advancing troops, and, brandishing his spear, appeared to be challenging the commander of the British to single combat. The rifle-shots that began to ring out caused him to retreat, and he again retired with his body-guard to the citadel.

16. The British cannonade on the gate was then stopped, a storming-party advanced up the mountain with little resistance, and, passing the outer and inner gates, went towards the royal house. There they found only dead and wounded warriors who had remained *faithful* to their sovereign to the last, and on the highest

part of the path lay the body of Theodore himself, who had fallen by his own hand. The inhabitants of Magdala were dismissed in safety, and the place itself, which was little more than a collection of huts, was burned to the ground.

17. Thus ended a campaign which was successful in obtaining the release of the prisoners, and was instrumental in vindicating the far-reaching influence of Britain, and in leaving the country where it had been prosecuted in a better condition than it had previously enjoyed for many years.

Comprehensive History.

Abyssinia, a country on the East coast of Africa, adjoining the Red Sea. It contains probably between three and four millions of inhabitants.

Bombay, chief town of one of the three presidencies of India. It is situated on the west coast.

Anglo-Indian, partly English, partly Indian.

commissariat, the department which is responsible for the proper feeding, clothing, &c., of the troops.

transport, the department which is responsible for providing means of conveyance.

reconnoitring, exploring.

fascines, bundles of rods or sticks bound at both ends and in the middle.

dépôts, places where goods are kept.

ammunition, powder, shot, shells, &c.

forage, food for cattle.

ordnance, large guns, cannon, &c.

neutrality, taking no part in the war.

fêted, paid special honour to.

propitiated, made favourable.

muleteers, mule drivers.

predatory, mere plundering.

plateau, an elevated plain.

concentrated, brought nearer to each other.

repel, drive back.

negotiate, try to come to terms.

condoned, forgiven, overlooked.

envoy, a person next in rank to an ambassador deputed to transact business with a foreign prince or government.

consul, a person commissioned to reside in a foreign country to protect the commercial interests of his own country.

avenue, way or opening.

formidable, adapted to excite fear and deter from approach.

gorge, a deep, narrow pass.

chaotic, confused.

impregnable, not to be taken.

invested, surrounded for the purpose of besieging.

rampart, that which is fortified to defend from assault.

averted, prevented.

specific, definite.

incomprehensible, that cannot be understood.

disconsolately, in despair.

liberated, released.

achieved, accomplished.

The Galla tribe, a savage tribe
on the South of Abyssinia.

sallied, rushed out suddenly.
combat, duel.

citadel, a fortress in or near
a city, intended for its defence.

vindicating, showing or supporting
by proof.

In what way had the King of Abyssinia incurred the displeasure of England? Why was Sir Robert Napier appointed commander of the expedition? What was the principal fear of the invading army? Where is Zoulla? What changes took place there, and why? Why was it necessary to keep up communication with Zoulla? Who was Kassa, and how did he act? In what did Theodore place his chief hope of success? How did Theodore at last try to avert destruction? Explain how the matter ended.



THE PARTING OF HECTOR AND ANDROMACHE.

The famous story of the *Ten Years' Siege of Troy*, a city which stood in the north-west of Asia Minor, by a *federation* of Greek chieftains has been told in the *marvel-*

lous verses of the oldest poet in Greece—Homer—in his *Iliad*.

Hector, the eldest son of Priam, King of Troy, was the leader of the Trojan army. In the following piece he is described as taking final leave of his wife Andromachē, and committing his only son Astyanax to the protection of his country's gods.

According to the belief of those far-distant times there was a large number of gods and goddesses,¹ of whom Zeus or Jupiter was chief.

Thus having spoke, th' illustrious chief of Troy
Stretch'd his fond arms to clasp the lovely boy.
The babe clung crying to his nurse's breast,
Scared at the dazzling helm, and nodding crest.
With secret pleasures each fond parent smiled,
And Hector hasted to relieve his child.
The glittering terrors from his brows unbound,
And placed the beaming helmet on the ground;
Then kissed the child, and, lifting high in air,
Thus to the gods preferred a father's prayer.

“O thou! whose glory fills th' ethereal throne,
And all ye deathless powers! protect my son!
Grant him, like me, to purchase just renown,
To guard the Trojans, to defend the crown,
Against his country's foes the war to wage,
And rise the Hector of the future age!
So when, triumphant from successful toils
Of heroes slain, he bears the reeking spoils,
Whole hosts may hail him with deserv'd acclaim,
And say, ‘This chief transcends his father's fame;’
While, pleased, amidst the general shouts of Troy,
His mother's conscious heart o'erflows with joy.”

¹ See *Myths and Legends of Ancient Greece and Rome*, by E. M. Berens. Blackie & Son, London and Glasgow.

He spoke, and fondly gazing on her charms,
Restored the pleasing burthen to her arms;
Soft on her fragrant breast the babe she laid,
Hushed to repose, and with a smile surveyed.
The troubled pleasure soon chastised by fear,
She mingled with a smile a tender tear.
The softened chief with kind compassion viewed,
And dried the falling drops, and thus pursued:

“Andromachē! my soul's far better part;
Why with untimely sorrows heaves thy heart?
No hostile hand can antedate my doom,
Till fate condemns me to the silent tomb.
Fixed is the term to all the race on earth;
And such the hard condition of our birth,
No force can then resist, no flight can save;
All sink alike, the fearful and the brave.
No more—but hasten to thy tasks at home,
There guide the spindle, and direct the loom.
Me glory summons to the martial scene,
The field of combat is the sphere for men,
Where heroes war, the foremost place I claim,
The first in danger, as the first in fame.”

Thus having said, the glorious chief resumes
His towering helmet, black with shading plumes.
His princess parts with a prophetic sigh,
Unwilling parts, and oft reverts her eye,
That streamed at every look; then, moving slow,
Sought her own palace, and indulged her woe.
There, while her tears deplored the god-like man,
Through all her train the soft infection ran;
The pious maids their mingled sorrows shed,
And mourn the living Hector as the dead.

—*Pope's Homer.*

ethereal, heavenly.

transcends, surpasses.

chastised, subdued.

untimely, not at the proper time.

antedate, bring on at an earlier time.

martial, warlike.

pious, loyal to their mistress.



JOSIAH WEDGWOOD.

1. Josiah Wedgwood, the first improver of English pottery and the originator of a new and important branch of English commerce, was born on the 12th of July, 1730, at Burslem, where his father earned a scanty living by working at the potter's wheel. He died when Josiah was eleven years old, and the boy at that early age was compelled to gain his bread by working as a thrower to his elder brother's wheel. At that time the manufacture of earthenware in England was in a very

rudimentary condition, and British households were supplied with the commoner sort of ware from Delft in Holland, while China furnished the costly porcelain. Staffordshire produced earthenware only of the coarsest quality, which was hawked about the country by the workmen themselves or by the common pedlars. A malignant attack of small-pox, which finally settled in his left leg and necessitated its amputation, compelled young Wedgwood to relinquish the potter's wheel.

2. He formed a partnership with a workman as poor as himself named Harrison, and began business at Stoke. His taste for decoration and a higher style of manufacture appears not to have suited the commercial notions of this partner nor of a succeeding one named Whieldon, in conjunction with whom he had made and dealt in earthenware knife-handles, green pickle leaves, and fanciful articles of that kind.

3. At length he returned to Burslem, and set up on his own account in a small thatched house, in which, by assiduous labour and close observation, animated by an ardent desire for improvement, he gradually made his way to prosperity. Among other facts, he observed that an earth containing silica which was black became white when calcined. Thereupon, mixing silica with the red powder of the potteries, he obtained a white material, which, being covered with a transparent glaze, formed a beautiful earthenware that not only drove Delft ware out of the market, but which soon acquired a high reputation in various parts of the world, and constituted an important item in the annual exports of this country.

4. A new branch of industry was planted in his native county. Thousands of hands were employed and well paid where a few years previously a comparatively small number made only a poor livelihood as potters. Inceas-

ing in business Wedgwood established a house in London, where Mr. Bentley became his partner. Every effort was made to add elegance of design to the other merits of Wedgwood's ware.

5. He found out the boy John Flaxman, then helping his father to make plaster casts in their shop in New Street, Covent Garden. "Well, my lad," said Wedgwood, "I have heard that you are a good draughtsman and clever designer. I'm a manufacturer of pots. I want you to design some models for me—nothing fantastic, but simple, tasteful, and correct in drawing. I'll pay you well. They are for pots of all kinds—tea-pots, jugs, tea-cups and saucers. Especially I want designs for a table-service. Begin with that. What you design is meant for the eyes of royalty. Think of that!"

6. The connection thus formed between the manufacturer and the artist was profitable and honourable to both. Wedgwood's single-hearted loyalty was sufficiently rewarded by the appointment of royal potter being conferred on him by Queen Charlotte. He was extremely successful in his imitations of ancient works of art; several specimens from Herculaneum having been intrusted to him by Sir W. Hamilton for that purpose. He also imitated in "Wedgwood ware" the celebrated Barberini or Portland vase lent him by the Duchess of Portland, and many other rare specimens of porcelain.

7. He was also a zealous improver of the county in which he lived. He made a turnpike road ten miles long, through the Potteries, and vigorously seconded Brindley in the construction of the Trent and Mersey Canal. In 1771 he built a mansion and works near Newcastle-under-Lyne, round which he formed a village for his workmen, calling it Etruria. Here he died on the 3d of January, 1795.

malignant, very dangerous.
rudimentary, imperfect, unfinished.
necessitated, compelled. [ished].
relinquish, give up.
assiduous, very diligent.

calcined, reduced to a powder by burning.
reputation, character.
Herculaneum, a city destroyed by ashes from Vesuvius A.D. 79.

How was Josiah Wedgwood's youth spent? Describe the earthenware in use at that time. How did Wedgwood make his material for his improved earthenware? Give an account of Wedgwood's interview with Flaxman. With what other great improvements did he identify himself? When and where did he die?

AN EGG HARVEST.

1. Humboldt, the great German traveller, in ascending the river Orinoco, in South America, came to an island, celebrated for the turtle-fishery, where a great "harvest of eggs" takes place annually. Here were encamped more than three hundred Indians of various races, each tribe distinguished by its peculiar mode of painting, keeping separate from the rest, together with a few white men who had come to purchase egg oil from them. A missionary, whose presence was necessary to procure a supply of oil for the lamp of the church and keep the natives in order, received Humboldt and his fellow-travellers with kindness, and made the tour of the island with them; showing them, by means of a pole which he thrust into the sand, the extent of the stratum of eggs that had been deposited wherever there were no eminences. The Indians asserted, that, in coming up the Orinoco, from its mouth to the junction with the river Apure, there is no place where eggs can be collected in abundance; and the only three spots where the turtles assemble annually in great numbers are situated between the mouth of the Apure and the Great Cataracts.

2. The arrau or tortuga, which deposits the eggs that are so much valued on the Lower Orinoco, is a large freshwater tortoise, with webbed feet, a very flat head, a deep groove between the eyes, and an upper shell composed of five central, eight lateral, and twenty-four marginal plates. The colour is dark gray above and orange beneath. When of full size it weighs from forty to fifty pounds. The eggs are much larger than those of a pigeon, and are covered with a calcareous crust.

3. The period at which the arrau deposits its eggs is when the river is lowest. About the beginning of February these creatures issue from the water and warm themselves on the beach, remaining there a great part of the day. Early in the month of March they assemble on the islands where they breed, when thousands are to be seen arranged in files along the shore. The Indians place sentinels at certain distances to prevent them being disturbed, and the people who pass in boats are told to keep in the middle of the river. The laying of the eggs begins soon after sunset, and is continued throughout the night. The animal digs a hole, three feet in diameter and two in depth, with its hind feet, which are very long and furnished with crooked claws. So pressing is the desire which it feels to lay its eggs that great confusion prevails and numbers are broken. Some of the tortoises are surprised by day before they have finished the operation, and, becoming insensible to danger, continue to work with great diligence even in the presence of the fishers.

4. The Indians assemble about the beginning of April and commence operations under the direction of the missionaries, who divide the egg-ground into portions. The leading person among them first examines, by means of a long pole or cane, how far the bed extends, and then

along the shores. The natives remove the earth with their hands, gather up the eggs, and carry them in baskets to the camp, where they throw them into long wooden troughs filled with water. They are next broken



and stirred, and remain exposed to the sun until the yolk, which swims at the surface, has time to thicken, when it is taken off and boiled. The oil thus obtained is limpid and destitute of smell, and is used for lamps as well as for cooking.

5. The shores of the missions of Uruana furnish 1000 jars annually, and the three stations may be supposed to furnish 5000. It requires 5000 eggs to fill a jar; and if we estimate at 100 the number which one

tortoise produces, and allow one-third to be broken at the time of laying, we may presume that 330,000 of these animals assemble annually, and lay 33,000,000 of eggs. This calculation is, however, much below the truth. Many of them lay only sixty or seventy; great numbers of them again are devoured by jaguars; the Indians take away a considerable quantity to eat them after being dried in the sun, and break nearly as many while gathering them; and, besides, the proportion that is hatched is such that Humboldt saw the whole shore near the encampment of Uruana swarming with young ones. Moreover all the arraus do not assemble on the three shores of the encampment, but many lay elsewhere. The number which annually deposit their eggs on the shores of the Lower Orinoco may, therefore, be estimated at little short of 1,000,000. The travellers were shown the shells of large turtles which had been emptied by the jaguars. These animals surprise them on the sand, and turn them on their back in order to devour them at their ease; they dig up the eggs also; and, together with the gallinago-vulture and the herons, destroy thousands of their brood.

Humboldt, a German traveller of great scientific attainments; born in 1769; died 1859.

Orinoco, one of the largest rivers of South America.

tortuga, the peculiar species of tortoise found in the Orinoco.

limpid, exceedingly transparent.

encampment, the place where a party is encamped.

Describe the persons who were engaged in the egg harvest. What kind of an animal is the tortuga? Who allots the shares of the harvest-ground, and how does he do it? How is oil manufactured from the eggs? What number of eggs are supposed to be laid each season, and by how many turtles? Describe the causes which tend to decrease the quantity of eggs available for making oil.

NATURE.

Nature never did betray
 The heart that loved her; 'tis her privilege,
 Through all the years of this our life, to lead
 From joy to joy; for she can so inform
 The mind that is within us, so impress
 With quietness and beauty, and so feed
 With lofty thoughts, that neither evil tongues,
 Rash judgments, nor the sneers of selfish men,
 Nor greetings where no kindness is, nor all
 The dreary intercourse of daily life
 Shall e'er prevail against us, or disturb
 Our cheerful faith, that all which we behold
 Is full of blessings. Therefore let the moon
 Shine on thee in thy solitary walk;
 And let the misty mountain winds be free
 To blow against thee; and, in after years,
 When these wild ecstasies shall be matured
 Into a sober pleasure, when thy mind
 Shall be a mansion for all lovely forms,
 Thy memory be as a dwelling-place
 For all sweet sounds and harmonies; oh! then,
 If solitude, or fear, or pain, or grief
 Should be thy portion, with what healing thoughts
 Of tender joy wilt thou remember me
 And these my exhortations!

—*Wordsworth.*

betray, act falsely to.
 privilege, peculiar right.
 impress, stamp.
 intercourse, communications.
 prevail, succeed.

ecstasies, joys.
 matured, ripened.
 harmonies, sounds that accord.
 solitude, loneliness.
 exhortations, advice.

THE GULF-STREAM.

1. Besides the tides, the sea has other motions of great regularity, called currents. The principal of these is the notable Gulf-Stream, a strong and rapid river, as we may say, in the sea, whose banks are almost as well defined as if they were formed of solid earth, instead of the same fickle fluid as the torrent itself. It first becomes appreciable on the western coast of Florida, gently flowing southward until it reaches the Tortugas, when it bends its course easterly, and runs along the Florida Reef, increasing in force till it rushes, with amazing rapidity, through the confined limits of the Strait of Florida, and pours a vast volume of tepid water into the cold bosom of the Atlantic.

2. Here, unrestrained, it of course widens its bounds and slackens its speed, though such is its impetus that it may be distinctly perceived even as far as the great bank of Newfoundland. Nor is its strength then spent; for many curious facts warrant us in concluding that even to the coasts of Scotland and Ireland, and down the shores of western Europe, this mighty marine river continues to roll its wonderful waters. The temperature of this current is much higher than that of the surrounding water, and this is so uniformly the case that an entrance into it is immediately marked by a sudden rise of the thermometer. Another unfailing token of its presence is the Gulf-weed, which floats in large fields, or more frequently in long, yellow strings, in the direction of the wind, upon its surface. The cause of this vast and important current seems to be the daily rotation of the earth.

3. If we turn a glass of water quickly upon its axis, we shall perceive that the glass itself revolves, but that the

particles of water remain nearly stationary, owing to the slightness of their cohesion to the glass. To a very minute insect attached to the vessel, it would seem that the water was rushing round in an opposite direction, while the glass remained stationary. Now the earth is whirled round with great rapidity from west to east, and the greatest amount of this rapidity is of course at the equatorial regions, being the part most remote from the axis; but the particles of water, for the same reason as those in the glass, to a certain extent resist the influence of this rotation, and appear to assume a motion in the opposite direction, from east to west. With respect to all the phenomena to be explained, this apparent motion is exactly the same as if it were real, and we shall consider it so. Now, examine a globe, or a map of the Atlantic, and you will see that this westerly "set" of the equatorial waters, meeting the coast of South America, is slightly turned through the Caribbean Sea, until it strikes the coast of Mexico, which, like an impregnable rampart, opposes its progress.

4. The stream, impelled by the waves behind, must have an outlet, and the form of the shore drives it round the northern side of the Gulf of Mexico, until it is again bent by the peninsula of Florida. But here the long island of Cuba meets its southerly course, and, like the hunted deer, headed at every turn, the whole of the broad tide that entered the Gulf, now pent up within the compass of a few leagues, rushes with vast impetus through the only outlet that is open, between Florida and the Bahamas. It is as if we propelled with swiftness against the air a wide funnel, the mouth being outwards, the tube of which was long and tortuous, and which terminated at length nearly at right angles to the mouth. **It is easy to imagine that a strong current of air would**

issue from the tube, exactly as the waters of the Gulf-Stream do from their narrow gorge.

5. The waters of the Pacific have the same westerly flow, but its force is broken, without being turned, by the vast assemblage of islands which constitute the Eastern Archipelago; it may, however, be recognized in the Indian Ocean, and, when bent southward by the African coast, and confined by the island of Madagascar, it forms a current of considerable force, which rounds the Cape of Good Hope, and merges into the Atlantic. Besides these there are other more local currents, which are not so easily explained, such as that which constantly flows out of the Baltic, and that which flows into the Mediterranean.

6. In each of these cases, while the main current occupies the middle of the channel, there is a subordinate current on each side close to the shore, which sets in the opposite direction. As in the case of the tides, it is obvious how serviceable these motions of the sea often are in aiding navigation, particularly as they are most strong and regular in latitudes where calms often prevail.

7. But we, who inhabit Western Europe, derive a much more obvious advantage from this great marine river, in our mild and equable climate. If we compare the Atlantic coasts of North America and of Europe in this respect, we shall better appreciate this advantage. St. John's, in Newfoundland, is nearly on the same parallel of latitude as Vannes, on the shore of the Bay of Biscay; but its climate is that of Norway. The coast of Labrador lies immediately opposite to Ireland; but its climate is about the same as that of Lapland.

8. On the other hand, the nearest resemblance to an English climate on the American side of the Atlantic,—at least so far as the mildness of the winters is concerned,

for the summers are far hotter,—must be sought in Alabama and Florida, which correspond in latitude to the North of Africa. It has been ascertained that the American climate is the rule, the European the exception. What, then, is the exceptional agency which blesses us with a climate whose geniality would equal ten or twelve degrees of latitude?

9. It is none other than the Gulf-Stream. This is in fact a vast hot water apparatus, heated in the tropics, and then poured along the shores of Europe, bringing with it its superincumbent strata of warm air. This air, too, is diffused on our shores, rather than those of America, by the prevalence of south and south-west winds, which, blowing, in gusty gales, characterize the North Atlantic. The influence of these winds is perceptible even as far eastward as the borders of Russia; but it is much more powerful in the maritime parts, where the warm water is constantly maintaining the elevated temperature of the air.—*The Ocean, by P. H. Gosse.*

tepid, lukewarm.

impetus, strong force.

cohesion, act of sticking together.

assume, take.

impregnable, that cannot be taken.

rampart, strong wall.

tortuous, winding.

subordinate, inferior.

obvious, evident.

appreciate, value.

geniality, agreeableness.

superincumbent, lying over.

diffused, spread out.

Describe the course of the Gulf-Stream. Why is it sometimes called a marine river? What do you know about the Gulf-weed? How will you illustrate the phenomenon of the Gulf-Stream? How does the Gulf-Stream affect the climate of Europe? Give examples showing its modifying character.

HYMN ON THE SEASONS.

1. These, as they change, Almighty Father, these
Are but the varied God. The rolling year
Is full of Thee. Forth in the pleasing Spring
Thy beauty walks, Thy tenderness and love.
Wide flush the fields; the softening air is balm;
Echo the mountains round; the forest smiles;
And every sense and every heart is joy.
Then comes Thy glory in the Summer month,
With light and heat refulgent. Then Thy sun
Shoots full perfection through the swelling year:
And oft Thy voice in dreadful thunder speaks,
And oft at dark, deep noon, or falling eve,
By brooks and groves in hollow-whispering gales.
Thy bounty shines in Autumn unconfined,
And spreads a common feast for all that lives.



In Winter, awful Thou! with clouds and storms
Around Thee thrown, tempest o'er tempest rolled,
Majestic darkness! on the whirlwind's wing

Riding sublime, thou bidd'st the world adore,
And humblest nature with thy northern blast.

2. Mysterious round! what skill, what force divine,
Deep felt, in these appear! a simple train,
Yet so delightful mix'd, with such kind heart,
Such beauty and beneficence combined;
Shade unperceived, so softening into shade;
And all so forming a harmonious whole,
That, as they still succeed, they ravish still.
But wandering oft, with rude unconscious gaze,
Man marks not Thee, marks not the mighty hand
That, ever busy, wheels the silent spheres;
Works in the secret deep; shoots steaming thence
The fair profusion that o'erspreads the spring;
Flings from the sun direct the flaming day;
Feeds every creature; hurls the tempest forth,
And, as on earth this grateful change revolves,
With transport touches all the springs of life.
3. Nature, attend! join, every living soul
Beneath the spacious temples of the sky,
In adoration join; and ardent raise
One general song! To Him, ye vocal gales,
Breathe soft, whose spirit in your freshness breathes.
Oh, talk of Him in solitary glooms,
Where o'er the rock the scarcely waving pine
Fills the brown shade with a religious awe.
And ye, whose bolder note is heard afar,
Who shake the astonished world, lift high to heaven
The impetuous song, and say from whom you rage.
His praise, ye brooks, attune, ye trembling rills;
And let me catch it as I muse along.
4. Ye headlong torrents, rapid and profound;
Ye softer floods, that lead the hurried praise

Along the vale; and thou majestic main,
A secret world of wonders in thyself,
Sound His stupendous praise, whose greater voice
Or bids you roar, or bids your roaring fall.



So roll your incense, herbs, and fruits, and flowers,
In mingled clouds to Him, whose sun exalts,
Whose breath perfumes you, and whose pencil paints.
Ye forests, bend; ye harvests, wave to Him;
Breathe your still song into the reaper's heart
As home he goes beneath the joyous moon.
Ye that keep watch in heaven, as earth asleep
Unconscious lies, effuse your mildest beams,
Ye constellations, while your angels strike,
Amid the spangled sky, the silver lyre.

5. Great source of day! blest image here below
Of thy Creator, ever pouring wide,

From world to world, the vital ocean round,
On nature write with every beam His praise.
The thunder rolls: be hush'd the prostrate world,
While cloud to cloud returns the solemn hymn.
Bleat out afresh, ye hills; ye mossy rocks,
Retain the sound; the broad responsive low,
Ye valleys, raise; for the Great Shepherd reigns,
And His unsuffering kingdom yet will come.
Ye woodlands, all awake; a boundless song
Burst from the groves! and when the restless day,
Expiring, lays the warbling world asleep,
Sweetest of birds! sweet Philomela, charm
The listening shades, and teach the night His praise.

6. Ye chief, for whom the whole creation smiles;
At once the head, the heart, the tongue of all,
Crown the great hymn! in swarming cities vast,
Assembled men to the deep organ join
The long resounding voice, oft breaking clear,
At solemn pauses, through the swelling base;
And, as each mingling flame increases each,
In one united ardour rise to heaven.
Or if you rather choose the rural shade,
And find a fane in every sacred grove,
There let the shepherd's lute, the virgin's lay,
The prompting seraph, and the poet's lyre,
Still sing the God of seasons as they roll.
7. For me, when I forget the darling theme,
Whether the blossom blows, the summer ray
Russets the plain, inspiring autumn gleams,
Or winter rising in the blackening east—
Be my tongue mute, my fancy paint no more,
And, dead to joy, forget my heart to beat.
Should fate command me to the farthest verge

Of the green earth, to distant barbarous climes,
 Rivers unknown to song; where first the sun
 Gilds Indian mountains, or his setting beam
 Flames on the Atlantic isles; 'tis naught to me;
 Since God is ever present, ever felt,
 In the void waste as in the city full;
 And where He vital breathes, there must be joy.

- s. When even at last the solemn hour shall come,
 And wing my mystic flight to future worlds,
 I cheerful will obey; there, with new powers,
 Will rising wonders sing! I cannot go
 Where universal love not smiles around,
 Sustaining all yon orbs, and all their suns;
 From seeming evil, still educing good,
 And better thence again, and better still,
 In infinite progression. But I lose
 Myself in Him, in light ineffable!
 Come, then, expressive silence, muse His praise.

—*Thomson.*

varied, changed.
 balm, soothing.
 refulgent, brilliant.
 northern blast, cold north wind.
 beneficence, goodness.
 unperceived, not seen.
 ravish, fill with delight.
 silent spheres, sun, moon, and
 planets.
 profusion, great abundance.
 ardent, earnestly.
 solitary, lonely.
 impetuous, passionate.
 humid, moist.
 main, the ocean.
 stupendous, wonderful.
 effuse, pour out.
 constellations, group of fixed
 stars.
 vital, life containing.

lyre, a musical instrument re-
 sembling a harp.
 prostrate, lying flat.
 Philomela, the nightingale.
 ardour, eagerness.
 rural, country.
 fane, temple.
 lute, a musical instrument re-
 sembling a guitar.
 lay, song.
 seraph, angel.
 theme, subject.
 russets, makes reddish brown.
 verge, border.
 void, empty.
 mystic, mysterious.
 sustaining, supporting.
 orbs, globes or worlds.
 educing, bringing out.
 ineffable, unspeakable.

THE YO SEMITE VALLEY IN CALIFORNIA.

1. This wonderful region, situated near the south-west base of the Sierra Nevada, almost directly inland from San Francisco, at a distance of 170 miles, is thus described by Mr. Frederick Law Olmsted:—

2. "The main feature of the Yo Semite is best indicated in one word—a chasm. It is a chasm nearly a mile in average width, however, and more than ten miles in length. The central and broader part of this chasm is occupied at the bottom by a series of groves of magnificent trees, and meadows of the most varied, luxuriant, and exquisite herbage, through which meanders a broad stream of the clearest water, rippling over a pebbly bottom, and eddying among banks of fern and rushes; and sometimes narrowed into sparkling rapids; and sometimes expanding into placid pools, which reflect the wondrous heights on either side.

3. "The walls of the chasm are generally half a mile, sometimes nearly a mile in height above these meadows, and, where most lofty, are nearly perpendicular, sometimes overjutting. At frequent intervals, however, they are cleft, broken, terraced, and sloped, and in these places as well as everywhere upon the summit they are overgrown by thick clusters of trees. There is nothing strange or exotic in the character of the vegetation, most of the trees and plants, especially those of the meadows and water side, are closely allied to, and are not readily distinguished from, those most common in the landscapes of the Eastern States or the Midland Counties of England.

4. "The stream is such a one as Shakspeare delighted in, and brings pleasing reminiscences to the traveller of the

Avon or the upper Thames. Banks of heart's-ease and beds of cowslips and daisies are frequent, and thickets of alder, dogwood, and willow often fringe the shores. At



several points streams of water flow into the chasm, descending at one leap from 500 to 1400 feet. One small stream falls in three closely consecutive pitches a distance of 2600 feet, which is more than fifteen times the height

of the falls of the Niagara. In the spray of these falls superb rainbows are seen.

5. "At certain points the walls of rock are ploughed in polished horizontal furrows, at others moraines of boulders and pebbles are found; both evincing the terrific force with which, in past ages of the earth's history, a glacier has moved down the chasm from among the adjoining peaks of the Sierras. Beyond the lofty walls still loftier mountains rise, some crowned by forests, others in simple rounded cones of light gray granite.

6. "The climate of the region is never dry like that of the lower parts of California. Even when for several months not a drop of rain has fallen 20 miles to the westward, and the country there is parched and all vegetation withered, the Yo Semite continues to receive frequent soft showers and to be dressed throughout in living green.

7. "After midsummer a light transparent haze generally pervades the atmosphere, giving an indescribable softness and exquisite dreamy charm to the scenery, like that produced by the Indian summer of the East. Clouds gathering at this season upon the snowy peaks which rise within 40 miles on each side of the chasm to a height of over 12,000 feet, sometimes roll down over the cliffs in the afternoon, and, under the influence of the rays of the setting sun, form the most gorgeous and magnificent thunderheads. The average elevation of the ground is greater than that of the highest peak of the White Mountains or the Alleghanies, and the air is rare and bracing; yet its temperature is never uncomfortably cool in summer, nor severe in winter.

8. "Flowering shrubs of sweet fragrance and balmy herbs abound in the meadows, and there is everywhere a *delicate* odour of the prevailing foliage in the pines and

cedars. The water of the streams is soft and limpid, as clear as crystal, abounds with trout, and, except near its source, is, during the heat of the summer, of an agreeable temperature for bathing. In the lower part of the valley there are copious mineral springs, the water of one of which is regarded by the aboriginal inhabitants as having remarkable curative properties. A basin still exists to which weak and sickly persons were formerly brought for bathing.

9. "The water has not been analysed, but that it possesses highly tonic as well as other medicinal qualities can be readily seen. In the neighbouring mountains there are also springs strongly charged with carbonic acid gas, and said to resemble in taste the Empire Springs of Saratoga. Associated with this valley in the grant of Congress to California for public purposes are four sections of land, about 30 miles distant from it, on which stand, in the midst of a forest composed of the usual trees and shrubs of the western slope of the Sierra Nevada, about 600 mature trees of the giant Sequoia [Wellingtonia]. Among them is one known through numerous paintings and photographs as the Grizzly Giant, which probably is the noblest tree in the world.

10. "Besides this, there are hundreds of such beauty and stateliness, that to one who moves among them in the reverent mood to which they so strongly incite the mind, it will not seem strange that intelligent travellers have declared that they would rather have passed by Niagara itself than have missed this grove.

11. "In the region intermediate between the two districts the scenery generally is of a grand character, consisting of granite mountains and a forest composed mainly of coniferous trees of great size. These are often more perfect, vigorous, and luxuriant than trees of half the

size on the Atlantic side of the continent. It is not, however, in its grandeur or in its forests' beauty that the attraction of this intermediate region consists, so much as in the more secluded charms of some of its glens, formed by mountain torrents fed from the snow banks of the higher Sierras."

region, country.

Sierra, a Spanish name applied to mountains whose summits present a saw-like appearance.

San Francisco, the capital of California, and the chief seaport on the W. coast of N. America.

main, chief.

indicated, described.

chasm, a wide opening.

magnificent, very grand.

luxuriant, very rich.

exquisite, very choice.

meanders, winds about.

perpendicular, upright.

exotic, foreign.

remembrances, reminders.

Falls of Niagara, one of the finest waterfalls in the world, on the river St. Lawrence, between Lake Erie and Lake Ontario in North America.

superb, most beautiful.

moraines, stones deposited by the melting of a moving glacier.

evinced, showing.

California, a large country in the western part of N. America.

glacier, an ice field.

transparent, that can be seen through.

pervades, spreads throughout.

Alleghanies, a range of mountains in the eastern parts of the United States in N. America.

indescribable, not to be expressed.

fragrance, smell.

foliage, leaves.

consecutive, one after another.

aboriginal, primitive.

analysed, examined chemically.

Saratoga, a town in the state of New York, United States of America.

coniferous trees, i.e. trees bearing cones, as the fir.

secluded, retired.

In what part of the world is the Yo Semite valley situated? How far is it from San Francisco? What is its length? Width? How high are the rocks on its sides? What flows through it? What vegetation is found there? What flowers found in England grow on the banks of the stream? Describe the climate after mid-summer. What sort of shrubs are found in this valley? In what part of the valley are the mineral springs found? What qualities does the water possess? What great trees are found near this valley?

CRUELTY TO ANIMALS.

1. I would not enter on my list of friends,
Though graced with polished manners and fine sense
(Yet wanting sensibility), the man
Who needlessly sets foot upon a worm.
An inadvertent step may crush the snail
That crawls at evening in the public path;
But he that has humanity, forewarned,
Will tread aside, and let the reptile live.
2. The creeping vermin, loathsome to the sight,
And charged perhaps with venom, that intrudes,
A visitor unwelcome, into scenes
Sacred to neatness and repose, the alcove,
The chamber, or refectory, may die:
A necessary act incurs no blame.
3. Not so, when held within their proper bounds,
And guiltless of offence, they range the air,
Or take their pastime in the spacious field,
There they are privileged; and he that hunts
Or harms them there is guilty of a wrong,
Disturbs the economy of Nature's realm,
Who, when she formed, designed them an abode.
4. The sum is this: if man's convenience, health,
Or safety interfere, his rights and claims
Are paramount, and must extinguish theirs.
Else they are all—the meanest things that are—
As free to live, and to enjoy that life,
As God was free to form them at the first,
Who in His sovereign wisdom made them all.

5. Ye, therefore, who love mercy, teach your sons
 To love it too. The spring-time of our years
 Is soon dishonoured, and defiled in most,
 By budding ills that ask a prudent hand
 To check them. But, alas! none sooner shoots,
 If unrestrained, into luxuriant growth,
 Than cruelty, most fiendish of them all.
6. Mercy, to him that shows it, is the rule
 And righteous limitation of its act,
 By which Heaven moves in pardoning guilty man;
 And he that shows none, being ripe in years,
 And conscious of the outrage he commits,
 Shall seek it, and not find it, in his turn!

—*Cooper.*

inadvertent, heedless or careless.
loathsome, exciting disgust.
alcove, a recess in a room.
refectory, a room where refreshment is taken.

economy, prudent arrangements or plans.
paramount, superior to all others.
unrestrained, not kept down.

CHESHIRE SALT-MINES.

1. The salt springs of Cheshire have been extensively worked since the reign of Charles II. What most astonishes the traveller is to find in the heart of the land, in a thoroughly agricultural county, salt works that he might reasonably expect to see only on the sea coast. The bitter sea water, which bubbles and meanders in every direction, allowing salt to filter and crystallize in the sun, the marine odour of the factories, the dismantled houses, bowing to the ground like wind-beaten ships—all produce

a strange contrast to the ploughed fields, the sheep browsing on the plain, and other pleasing pictures of rural life.

2. The image of the ocean becomes still more lively when we remember that the Cheshire springs owe their mineral wealth to old seas petrified into salt rocks. At such a moment the visitor does not fancy himself separated from the stormy waves by districts of land, but only by the shores of time.

3. Though the salt springs are very productive, the mines offer the stranger a scene of facts and works even more interesting. A vague tradition tells us that the salt-mines, like the brine springs, were formerly worked by the Romans; it is more probable, however, that the salt rocks were discovered, if not found out again, about a mile from Northwich in 1670 by miners who were looking for coal. Before this period salt was obtained from the Droitwich springs in Worcestershire.

4. The opening of the Cheshire mines increased the internal and external trade of the country to a very considerable extent. At the present day the nature of the subsoil is known, and the English, by a wise feeling of foresight, have measured the depths of the treasure buried by terrestrial revolutions. At Northwich a first bed of rock-salt is found, separated from a second and deeper one by a bed of hard stone and clay. These two saline masses, nearly free from earthy matter, have the astonishing thickness of ninety to one hundred feet; from this fact we may form an idea of the richness of this formation, but in order to read the secret of the British race, which incessantly renews its force and means of supply by industrious contact with the interior of the earth, we must go down into a salt-mine.

5. I was led along a path by the side of a field, on which a flock of rooks had settled, and beneath this

field the mine extended. High chimneys and buildings of clumsy construction indicated the mouth of the pit; beneath a shed, covered with tiles, and in which lay pell-mell enormous fragments of rock-salt, was the shaft, on the edge of which I found a man, who asked me if I wished to go down. On my reply in the affirmative, a large barrel, three or four feet in circumference, suspended by a powerful chain, was lowered. I mounted the platform and jumped into the tub, which covered me nearly to the neck. As there were three of us, we were advised to keep close together, because the mouth of the pit was narrow, and lined with iron to a certain depth, and we ran a risk of coming into a rude contact with the sides of the shaft.

6. The barrel, lifted by the chain, oscillated for a second over the pit's mouth, and then rapidly descended in the increasing darkness. Already all was silent; nothing was to be heard save the filtering of the salt water through the rock. Though the depth of the shaft was not more than three hundred and thirty feet, and the descent only lasted a few minutes, this journey even seemed to be long and monotonous. It is natural enough in such a case to raise the eyes to the pit's mouth in order to seek the light, the circle of which grew momentarily narrower. When about the middle of the shaft this light appeared like a moon; when the barrel reached the bottom it was only a star.

7. We were received by a man with gray hair and a venerable face, who had worked in the mine since the age of twelve. He gave each of us a candle; in his own hand he had a miner's candlestick, that is to say, a lump of soft clay, which allowed the light to be fixed against the sides of the rock. These lights only seemed to render the darkness more visible, which, at the

first glance especially, seemed to cover the cavern like a black veil. The salt-mines, however, have nothing of that solemn horror which reigns in the entrance to coal-mines, and you do not feel those drops of muddy water



fall on your head which trickle through the damp and low roof like the tears of night.

s. A salted but dry air, a pleasant and uniform temperature penetrate these gloomy places, and the roof of the mine, supported by side walls, or by pillars cut in the solid rock, is of considerable elevation.

For the rest, the works and the system of excavation are nearly the same as in collieries; man forces a way

through the thickness of the solid and crystallized masses by the aid of pick and wedge, or gunpowder.

9. As you advance in a salt-mine the scene widens, and the internal space is revealed to you. It is then difficult not to admire this simple but grand architecture; these empty spaces extending in the darkness like the nave of an immense subterranean church; these works, which have the shape, colour, and transparency of sugar-candy; these massive pillars, whose fronts shine in the reflection of the light you carry in your hand; and more than all this, the religious character which silence and night shed over these labours of human industry.

10. From time to time you see one or more of the workmen's lights flashing in the dark extremity of the mine. As the men move about, these lights vaguely shadow forth human forms like those we fancy to ourselves inhabiting a wizard's cave. From time to time, too, the habitual silence of these vaults is violently disturbed by explosions that sound like thunder; it is the powder dislocating the limbs of the rock. You walk over a pile of ruins; the uneven floor is covered with gigantic fragments of crystal, which have principally a yellow or reddish colour, though some are white and transparent as glass. At the sight of these rocks, this mineral wealth, which seems to grow again beneath the strokes of the pick or the train of gunpowder—for the mass appears inexhaustible—you cannot but believe in a wise Providence of nature.

11. Man likes to imagine that for him, and in view of his wants, these enormous magazines of salt were swallowed in the earth; that departed seas laboured for him and built these rocks at an infinitely remote period, when none of the animal forms now living on the surface of the British Isles had left the mould of creation.

12. At length we reached the end of the mine; some

workmen were engaged here in extracting blocks of salt, which were piled up nearly to the roof. Among the workmen some were performing a very hard task,—they were digging out large pieces of crystal in the thickness of the wall, or forming the channel which, when filled with powder, would blow up the masses of rock. The number of workmen and the mode of transport vary according to the importance of the mine; in the one I was visiting, fifty men extract weekly fifteen hundred tons of raw salt. In other mines, horses, ponies, and donkeys are employed to draw the blocks of salt on a tramway.

13. From the mouth of the pit the rock-salt is conveyed to the boiling-house, where it is purified and assumes the whiteness of snow. These boiling-houses are clumsy buildings, with furnace and tall chimneys, which at night flare in the sky like torches; you ascend by a wooden ladder to a platform, in the centre of which steams a cauldron, open and of but slight depth, about twenty feet long by twelve feet wide. Into this, the salt is thrown, more or less loaded with earthy matter, and just as it is brought from the bowels of the earth. When it has been boiled for six or seven hours, it is collected on barrows, and conveyed to a hot room, where it is left to dry for some days.

14. From this moment the salt is made, and it only remains to place it in the storehouse. The whiteness of the manufactured salt contrasts strikingly with the gloomy and smoke-stained walls of the factory, and the surrounding heaps of coals.

15. The sight of such works arouses more than one thought as to the care and sacrifices required for the preparation of the most ordinary matters. The Cheshire furnaces have roared, the engine-wheels have turned, the lives of workmen have even been destroyed, in more than

one instance, by various accidents, before man can enjoy on his table a thing so trifling as a pinch of salt.—*Esquiros*.

meanders, winds.

crystallize, form crystals.

petrified, turned to stone.

subsoil, under soil.

terrestrial revolutions, the different changes that the earth's surface has undergone in the course of ages.

Northwich, a town in Mid Cheshire, on the river Weaver.

pell-mell, in confusion.

shaft, entrance to the pit.

oscillated, moved backward and forward.

monotonous, without variety.

momentarily, every moment.

venerable, old-looking.

excavation, digging out.

architecture, style of building.

subterranean, underground.

dislocating, separating.

inexhaustible, cannot be exhausted.

extracting, getting out.

In whose reign were the salt-mines of Cheshire first worked? What does tradition say about them? Who discovered these mines? In what year? What is the thickness of the two masses of salt rock found at Northwich? Describe the pit's mouth. How deep was the pit? In what respect does a salt-mine differ from a coal-mine? What is there to admire in a salt-mine? Describe the appearance and colour of the salt. How is the salt detached from the measures? What reflections does a visit to a salt-mine suggest? How is the salt purified? Describe a boiling-pan. What shape are the blocks of salt when they are put into the drying-house? What thoughts are likely to be suggested by a sight of the works?



PREFIXES DERIVED FROM THE LATIN.

Prefixes modify the meaning of the words to which they are joined: thus *pro* means *before*, and *retro* means *behind*: hence the word *prospect* signifies a looking forward, and *retrospect*, a looking backward.

The final consonant of a prefix is frequently changed in order to avoid an unpleasant sound: thus instead of saying *ad-cuse*, *ad-firm*, *ad-tend*, the prefix *ad* is changed to *ac*, *af*, or *at*, as will be seen in the following list.

A, **ab**, or **abs**, *away, from*: a-vert, ab-use, abs-tain.

Ad (ac-, af-, al-, an-, ap-, as-, at-), *to, towards*: ad-monish, ac-cuse, af-firm, al-lude, an-nihilate, ap-ply, as-sent, at-tend.

Ante (anti-), *before*: ante-diluvian, anti-cipate.

Circum (circu-), *around*: circum-ference, circu-it.

Con (col-, com-, co-), *together*: con-sent, col-lect, com-pare, co-equal.

Contra (counter-), *against, in opposition to*: contra-dict, counter-act.

De, *down from*: de-grade, de-scend.

Dis (dif-, di-), *apart, in different directions*: dis-sent, dif-ference, dilute.

Ex (ef-, e-), *out of*: ex-pel, ef-fect, e-ject.

Extra, *beyond*: extra-ordinary.

In (il-, im-, ir-), *in, into*: in-tend, il-lusion, im-pel, ir-rigate.

In (il-, im-, ir-), *not*:* in-activity, il-legal, im-possible, ir-regular.

Inter, *between*: inter-fere.

Intro, *within*: intro-duce.

Ob (oc-, of-, op-), *in front of, against*: ob-ject, oc-cur, of-fer, op-pose.

Per (pel-, pur-), *through*: per-suade, pel-lucid, pur-sue.

Post, *after*: post-pone, post-script.

Præ (pre-), *before, over*: pre-side, pre-fix.

Præter, *past, beyond, except*: præter-natural.

Pro, *onward, forth*: pro-pose, pro-duce, pro-spect.

Re, *back*: re-pel, re-mit.

Retro, *backwards, behind*: retro-spect, retro-grade.

Se, *apart*: se-duce, se-clude.

Sub (suc-, suf-, sup-, su-), *under*: sub-scribe, suc-cour, suf-fer, support, su-spect.

Subter, *under*: subter-ranean.

Super (sur-), *above*: super-sede, sur-mount.

Trans (tra-), *beyond, across*: trans-act, tra-dition.

* Un- has the same meaning, but it is strictly an English prefix, as un-kind. This prefix, *in*, or *un*, is called a privative, because it takes away the meaning of the simple word: e.g. "unkind," means "not kind." Compare "α-, α-, α-" the Greek prefixes.

PREFIXES DERIVED FROM THE GREEK.

Amphi, *both, two*: amphi-bious.
An or **a**, *not*: an-archy. (A privative like the Latin *in*.)
Ana, *up*: ana-tomy.
Anti (ant-), *against, opposite to*: anti-pathy, ant-arctic.
Apo, *from*: apo-state.
Auto, *self*: auto-biography, auto-graph.
Cata (cat-), *down*: cata-strophe, cat-echism.
Dia, *through*: dia-logue.
En (em-), *in, on*: en-thusiasm, em-phasis.
Epi, *upon*: epi-taph.
Ex (ec-), *out of*: ex-odus, ec-stasy.
Hyper, *over*: hyper-critical.
Hypo, *under*: hypo-crite.
Meta, *besides*: meta-morphose, meta-phor.
Para, *alongside of*: para-ble, para-phrase.
Peri, *round*: peri-phrasis, peri-od.
Syn (sym-, syl-), *together with*: syn-tax, sym-pathy, syl-lable.

DERIVATIONS OF SOME OF THE WORDS OCCURRING
IN THIS BOOK.

I. DERIVATIVES FROM THE LATIN.

Suggestive Notes.

1. Latin nouns are generally given in the nominative and genitive cases, in order to show the root of the word more clearly: as *rex, reg-is*.

2. Latin verbs are generally given in the infinitive and past participle, so that the two forms of the word may be expressed: as *ag-ere, act-um*.

3. Words derived from the Latin are of two kinds: the first kind consists of those which have come directly from the Latin language, which generally are easily recognized; as from *rex, reg-is* comes *regal*; from *lex, leg-is* comes *legal*.

4. The second kind consists of those which have come into our language through the Norman-French, introduced at the time when William the Conqueror and his Norman descendants ruled in England. The French language is called a *Romance* language, like the Spanish, Portuguese, and Italian, because all these languages were derived from the Latin spoken by the *Roman* soldiers. These Norman-French words were therefore for the most part taken from Latin,

but they have been much more altered from their original form. Thus we have *royal*, as well as *regal*, from *rex*; and *loyal*, as well as *legal*, from *lex*; we also have *diurnal* and *journal* from the Latin *dies*, a day.

5. Sometimes we have the same Latin word used in two or more different forms in English. *Royal* and *regal*, *loyal* and *legal*, have been already mentioned. But there are many more. Thus

From the Latin word *de-struo*, *de-structum*, we have destruction, destroy;

"	"	<i>factum</i>	"	fact, feat;
"	"	<i>factio-nis</i>	"	faction, fashion;
"	"	<i>concip-ere, concept-um</i> ,	"	conception, conceit;
"	"	<i>fidel-is</i>	"	fidelity, fealty;
"	"	<i>frag-ilis</i>	"	fragile, frail;
"	"	<i>persequor, persecutus</i> ,	"	persecute, pursue;
"	"	<i>providens, provident-is</i> ,	"	provident, prudent;
"	"	<i>superficies</i>	"	superficies, surface;
"	"	<i>securus</i>	"	secure, sure;
"	"	<i>traditio-nis</i>	"	tradition, treason;

and many others. The latter form is derived from the Latin through the Norman-French. But probably in every case the Norman-French form was introduced into our language before the direct Latin form. Thus *pursue* is an older word than *persecute*. (Trench, *English Past and Present*, Lecture 1.)

6. Only a very few of the derivatives are here given, chiefly those used in this book. From one root alone, *pon-ere*, *posit-um*, we have about 250 words. One hundred and fifty-four Greek and Latin primitives yield nearly 15,000 words. (Angus, *Handbook of the English Language*, p. 46.)

7. The same root-word is often repeated in different forms for the sake of convenience: thus *ag-ilis* will be found, as well as *ag-ere*, though both come from the same root, *ag*.

8. The same English word will often be found in connection with two Latin words: thus *manufacture* is derived partly from *manus*, the hand, and *facere*, to make.

9. References to well-known books are inserted occasionally, showing where the teacher may find additional hints and illustrations.

Aequus, *level, fair, just*: equal, equivocate (*vocare*), iniquity.

Ager, *agri*, *a field*: agriculture (see *colere*), agricultural.

Ag-ere, *actum*, *to put into motion, to drive, to do*: act, action, active, actual, agency, in-active, exact, navigate, transact, transaction.

Ag-ilis, *one that is put into motion, quick, nimble*: agile, agility.

Ango, *anxi*, *to strangle, to twist*: anguish, anxiety, anxious.

Animus, *mind, spirit, courage*: animate, inanimate, unanimous (*unus*).

Antiquus, *old, out of date*: antique, antiquity, antics.

Aperi-re, *apertum*, *to open*: aperture.

Agna, aster: music, sometimes sincere.

Act-ere, to plough, urbia. Taylor's *Writs and Pleas*, p. 66, 'de Rite, and Max Müller's *Science of Language*, i. 234.)

Act-ere, acti, to turn, urbia, actur.

Act, act-is, skill, art, artificial, discern, action, artist.

Agere, agitur, to cause to grow, augment, author, authority, autumn.

Auxilium, help, auxiliary.

Brevia, short, brevity, abbreviate.

Caballus, a little horse: cavalry, chivalry.

Cad-ere, casum, to fall, accident, case, casual, occasion.

Cad-ere, casum, to cause to fall, to strike: decide, decision.

Cand-ere, to glow, to be bright or white: candour, candid, candle, canditate (because in Rome such persons wore a white garment).

Cap-ere, captum, to take, to seize: accept, acceptance, anticipate, capable, incapable, captive (captive), captivate, conceive, deceive, deception, except, exception, perceive, perceptible, receive, reception.

Caput, capit-is, the head, surge: cape, capital, captain, chapter, chief, achieve, precipitate, precipitous.

Cave-re, cautum, to be on one's guard, to beware: cautious, in-cautiously, precaution.

Cava, hollow: cave, cavern, cavity, concave, excavate.

Ced-ere, cessum, to go, withdraw, yield: accede, accession, ancestor, excess, excessive, procedure, proceed, procession, succeed, successive.

Cern-ere, cernum, to judge, select: concern, decree, discern, discreet, secret.

Civis, a citizen: civil, civilize, citadel, city, citizen.

Claud-ere, clausum, to shut in: clause, close, closet, conclude, conclusion, include, seclude, seclusion.

Cohors, cohort-is, an inclosed place: court, courtly, courtesy. (Max Müller's *Science of Language*, ii. 252).

Col-ere, cultum, to till: culture, cultivate, agriculture (ager), colony.

Cord, cord-is, the heart: cordial, concord, discord, discordant, record.

Corpus, corpor-is, the body: corporate, corpse, incorporate.

Cred-ere, creditum, to believe: creed, credit, credible, incredible, creditable.

Cura, care: accurate, cure, curate, curious, curiosity, curative, incurable, procure, secure, security.

Curr-ere, cursum, to run: course, current, cursory, concourse, excursion, incur, intercourse, recourse, recurring, succour.

Dic-ere, dictum, to say, speak: contradict, ditto (as said), index, indicative.

Dies, a day: dial, diary, diurnal, journal, journey. (Max Müller's *Science of Language*, i. 46, note.)

Dignus, worthy: dignity, disdain, indignity, indignant.

Dare, datum, to put, to give: add, addition, condition, date, edition, pardon.

- Duc-ere, ductum, to lead:** adduce, aqueduct (*aqua*), conduce, conduct, duke, induce, introduce, produce, production; (*educare*, to educate).
- Ens, esse, being, to be:** essence, essential, absent, absence, present, presence.
- Eo, i-re, itum, to go:** ambition, count (*com-es, comit-is*), circuit, initial, perish, transit.
- Experi-ri, expertum, to try:** expert, experience, experiment.
- Faber, fabri, a workman:** fabric, fabricate, forge.
- Fac-ere, factum, to make or do:** fact, feat, benefactor, beneficent, defect, defeat, fashion, feature, infectious, magnificence (*magnus*), officer, perfect, perfection, profit.
- Fac-ilis, that can be done easy:** facility, difficult, difficulty.
- Fall-ere, falsum, to deceive:** false, fault, falsehood, infallible.
- Fama, a report:** fame, famous.
- Fanum, a temple:** fane, profane.
- Fari, fatum, to speak:** fate, fatal, fable, infant, ineffable, preface.
- Fer-re, latum, to bear, to carry:** circumference, defer, differ, difference, dilate, infer, offer, prefer, transfer, translate, translation, refer, relate, relation.
- Fides, faith:** confident, fidelity, fealty, defy.
- Fig-ere, fixum, to fix:** affix, prefix, suffix.
- Finis, the end, limit:** define, definite, final, finish, confine, infinite, infinitive, refine.
- Firmus, strong:** affirm, confirm, firm, firmament, affirmative, infirm.
- Flect-ere, flexum, to bend:** reflect, reflection, reflector, inflection.
- Flos, flor-is, a flower:** flower, flourish, floral.
- Fœdus, fœder-is, a treaty:** confederate, confederation.
- Fors, forte, chance:** fortune, unfortunately.
- Fortis, brave, strong:** fort, fortress, fortify, forcible, effort, force.
- Frang-ere, fractum, to break:** fragile, fraction, fragment, frail, fringe.
- Frustra, in vain:** frustrate.
- Fund-ere, fusum, to pour out:** confound, confuse, confusion, diffusion, fund, profusion, profound, refuse.
- Fur-ere, to be mad:** fury, furious.
- Gaude-re, to rejoice:** joy, enjoy, enjoyment.
- Genus, gener-is, a kind:** general, gender, gentle, generation, progeny.
- Gradi-ri, gressus, to go, to march:** grade, gradual, degrade, degradation, degree, congress, progress, transgress.
- Gratus, pleasing:** grateful, gracious, gratitude, congratulate, disgrace.
- Habe-re, habitum, to have, to hold:** habit, exhibit, inhabitant, prohibit, habitual.
- Hære-re, hæsum, to stick to:** adhere, cohesion, adhesive.
- Hauri-re, haustum, to drain:** exhaust, inexhaustible.
- Heres, hered-is, an heir:** heir, heiress, heirloom, inherit, hereditary, heritage.

Horre-re, *to shudder, to bristle*: horrid, horror, abhor.

Hospes, **hospit-is**, *a guest, or a host*: hospitable, hospital, hotel, host.

Humus, *the ground*: humble, humility.

Imago, **imagin-is**, *an image*: image, imagine, imagination, imaginary.

Impera-re, **imperatum**, *to command*: empire, emperor, imperial, imperative.

Jac-ere, **jactum**, *to throw*: object, project, conjecture, adjective, dejection.

Jugum, *a yoke*: conjugate, subjugate.

Jung-ere, **junctum**, *to join*: juncture, conjunction, sub-junctive, join, joint.

Labi, **lapsum**, *to slip*: lapse, elapse.

Labor, **labor-is**, *work*: labour, laboratory.

Leg-ere, **lectum**, *to choose, to select*: elect, lecture, lesson, neglect, intellect, intelligent, collect, college, recollect, diligent, legend.

Lex, **leg-is**, *law*: legal, illegal, loyal, loyalty, legitimate.

Liber, *free*: liberty, deliver, liberal, illiberal.

Litera, *a letter*: literal, literary, literature.

Locus, *a place*: local, locomotive (*movere*).

Loqui, **locutum**, *to speak*: eloquent.

Lud-ere, **lusum**, *to play*: allude, allusion, delude, elude, illusion.

Magnus, *great*: magnitude, magnate, magnificent (*facere*), magnify.

Major, **major-is**, *greater*: majority, majesty.

Manda-re, **mandatum**, *to give in charge*: mandate, command, commandment, demand.

Mane-re, **mansum**, *to remain*: mansion, permanent, remain, remainder.

Manus, *the hand*: manuscript (*scribere*), manual, manufacture (*facere*), maintain.

Medius, *the middle*: immediate, intermediate.

Melior, **melior-is**, *better*: ameliorate, amelioration.

Memor, *mindful*: memory, memorial, memorable, commemorate.

Merg-ere, **mersum**, *to plunge*: immerse, emerge, emergency.

Merx, **merc-is**, *merchandise*: merchant, commerce, commercial, mercantile, merchandise.

Minē-re, *to project* (chiefly used with compounds, *im-minere*, *e-minere*, *pro-minere*): eminent, imminent, prominent, prominence.

Minor, **minor-is**, *less*: minority, minister. (Max Müller's *Science of Language*, ii. 254.)

Minu-ere, **minutum**, *to lessen*: minute, diminish.

Mitt-ere, **missum**, *to send*: admit, admission, commit, mission, missionary, permit, permission, promise, transmit, transmission, unintermitting.

Modus, *a measure or manner, a limit*: mode, model, moderate, modesty, mood.

Mone-re, **monitum**, *to warn, to advise*: monument, admonish.

Mons, **mont-is**, *a mountain*: promontory, amount, surmount, mountainous.

- Mos, mor-is, a manner or custom:** moral, immoral, morality.
- Move-re, motum, to move:** motion, moveless, emotion, immovable, locomotion (*locus*), remove, remote, moment.
- Multus, many:** multiply, multitude.
- Nascor, natus, to be born:** native, nation.
- Natura, nature:** natural, naturalist.
- Nect-ere, nexus, to bind together:** connect, connection, annex.
- Nomen, nomin-is, a name:** nominal, ignominious, noun.
- Norma, a rule:** enormous, abnormal.
- Nosc-ere, notum (nobilis, well-known), to know:** note, notoriety, noble, nobility, denote, recognize, reconnoitre.
- Numerus, a number:** numerous, enumerate.
- Nuncia-re, nunciatum, to report:** announce, denounce, pronounce, pronunciation.
- Opus, oper-is, work:** operation, operative.
- Ordo, ordin-is, rank, order:** ordinary, extraordinary, subordinate, ordain.
- Origo, origin-is, the beginning:** origin, original, originate, aboriginal.
- Oriri, ortus, to rise:** oriental.
- Palatium, a palace:** palace, palatial. (Max Müller's *Science of Language*, ii. 251.)
- Pand-ere, passum or pansum, to spread:** expand, expanse, pace, passage, trespass.
- Fang-ere, pactum, to strike:** compact.
- Par, equal:** compare, comparison, incomparable, peer, pair.
- Para-re, to get ready:** prepare, repair, apparatus.
- Pare-re, to become visible:** apparent, appearance, transparent.
- Pars, part-is, a part:** partial, participate (*capere*), impartially, particular, depart, parcel.
- Pax, pac-is, peace:** peaceable, pacific, pacify.
- Pauper, pauper-is, pauper:** pauperism, poor, poverty.
- Pell-ere, pulsum, to drive:** compel, compulsion, impel, expel, expulsion, propel, impulse, repel.
- Pende-re, to hang:** depend, independent, suspend, suspense, pendulous.
- Periculum, danger:** experiment, peril, perilous.
- Pes, ped-is, a foot:** pedestrian, expedite, expedition, impede, pedicle, expedient.
- Pet-ere, petitum, to ask, to seek:** compete, impetuous, petition, perpetual, appetite, repeat.
- Ping-ere, pictum, to paint:** depict, pictorial, picture, picturesque.
- Place-re, placitum, to please:** pleasure, pleasant, please.
- Plect-ere, plexum, to bend, to twist:** perplex, complex, double (*duplex*).
- Ple-re (only used in composition), to fill; plenus, full:** complete, accomplish.
- Plica-re, plicatum, to fold:** accomplice, apply, pliant, reply, simple, suplicate.
- Poena, penalty:** penance, repent, penalty, impunity, punishment.

Pendus, pender-is, weight: ponder, pound.

Pen-ere, positum, to place: post, position, compose, depôt, depose, disposal, expose, exposure, opposite, opponent, propose, purpose, suppose, preposition, postage.

Populus, people: popular, people, populous, public, publish.

Porta-re, to carry: export, import, portable, transport, support.

Portus, a harbour: port, opportunity.

Potsum, pot-ens, to be able: impotent, possible, impossible.

Prehend-ere, prehensum, to lay hold of: apprehend, comprehend, comprehensive, apprentice, enterprise, prison, surprise.

Press-ere, pressum, to press: pressure, impress, express, oppression.

Primus, first: prime, primrose.

Princeps, princip-is, chief: prince, principal, principle.

Priva-re, to take away: deprive, deprivation, private.

Proba-re, probatum, to test, to prove: probable, proof, prove, improvement.

Proprius, one's own, peculiar: proper, property, appropriate, propriety.

Put-a-re, putatum, to prune, to set in order, to think: dispute, compute, impute, reputation.

Quaer-ere, quaesitum, to seek: acquire, acquisition, conquer, conquest, exquisite, inquiry, request, question, unquestionable, inquest, query.

Qualis, of what kind: quality, qualify, disqualify.

Quies, quiet-is, rest: quiet, quietude.

Rap-ere, raptum, to snatch: rapid, rapacious.

Reg-ere, retum, to rule: direct, erect, correct, regular, regulation, regiment.

Res, a thing: real, unreal, reality.

Rex, reg-is, a ruler: regal, regalia, royal, royalty, reign.

Rota, a wheel: rotation, rote, route.

Rotundus, round: surround.

Rump-ere, ruptum, to break: abrupt, corrupt, corruption, rupture, eruption.

Sali-re, saltum (sultum in compounds), to leap: insult, exult, result, assault, salmon.

Salus, salut-is, health, safety: salute, salutation.

Sanus, sound: sane, insane, insanity.

Satis, enough: satisfy, satisfaction (*facere*), saturate.

Scand-ere, scansum (scensum in compounds), to climb: ascend, ascent, descend, condescend.

Scire, to know: science, conscience, conscious, scientific.

Scrib-ere, scriptum, to write: subscribe, prescribe, scripture, indescribable, scribble.

Seca-re, sectum, to cut: section, insect, sect.

Securus, free from care: secure, sure, surety, surely.

Sede-re, sessum (sido in composition), to sit: preside, reside, see (of a bishop), siege, session.

Senti-re, sensum, to feel: sense, sensibility, consent, assent, scent, sentence.

- Sequi, secutum, to follow:** consequence, prosecute, persecute, pursue, pursue, ensue.
- Ser-ere, sertum, to join:** assert, insert, series, sermon.
- Serva-re, servatum, to keep:** preserve, observe, preservation.
- Servi-re, servitum, to be a slave:** serve, service, servant, serviceable, deserve.
- Signum, a mark:** sign, signal, consign, design, designate, signature, signify.
- Similis, like (simul at the same time):** simile, assimilate, assemble, semblance.
- Sist-ere (perfect stiti), to stop:** resist, assist, consist, exist, substitute, constitute.
- Socius, a companion:** social, associate, society.
- Solv-ere, solutum, to loosen, to pay:** solve, dissolve, resolve, solution, resolution, absolute.
- Sonus, sound:** consonant, sonorous, resound, sound.
- Spec-ere, spexum, and spect-are, spectatum, to see, look at:** species, special, specimen, spectral, speculate, aspect, expect, prospect, respect, suspicion, conspicuous, retrospect.
- Spera-re, speratum, to hope:** despair, desperation.
- Spira-re, spiratum, to breathe: spiritus, breath:** spirit, conspire, expire, inspire, inspiration, respiration.
- Sponde-re, sponsum, to promise:** despond, correspond, despondency, responsive.
- Sta-re, statum, to stand:** station, state, statue, stationer, stable, constant, distance, establish, obstacle, substance.
- Stern-ere, stratum, to lay flat:** stratum, street, prostrate, consternation.
- Stingu-ere, stinctum (only used in compounds), to prick, to mark:** distinguish, distinct, extinct, instinct.
- String-ere, strictum, to bind, hold fast:** strict, district, restrict, strain.
- Stru-ere, structum, to lay in order, to build:** structure, construct, destruction, destroy, instrument.
- Sum-ere, sumtum, to take:** consume, consumption, assume, presume.
- Surg-ere, surrectum (rego), to rise:** surge, insurgent, resurrection, source, resource.
- Supremus, or summus, the highest part:** summit, supreme, supremacy, sum.
- Tang-ere, tactum, to touch:** contact, entire, contagion, integrity.
- Teg-ere, tectum, to cover:** detect, protect, protection.
- Tempera-re, to mix, to moderate:** temper, temperate, temperature.
- Tempus, tempor-is, time:** temporal, temporary, extempore, tense.
- Tend-ere, tentum or tensum, to stretch, to tend:** attend, attention, contend, pretence, intense.
- Tene-re, tentum, to hold:** continent, continual, continuous, tenacious, abstinence, impertinent, contain, sustain, sustenance, maintain, maintenance, retinue.
- Tenta-re, tentatum, to try:** tempt, attempt, temptation.

Ter-ere, tritum, to rub: contrite, detriment.

Terminus, a limit, boundary: term, determine, determination.

Terra, the earth: Mediterranean (*medius*), subterranean, terrestrial territory.

Terre-re, territum, to frighten: terror, terrible, terrify.

Testis, a witness: test, contest, testimony, testament.

Torque-re, tortum, to twist: contortion, torture, distort, tortuous, torment, retort.

Trad-ere, traditum, to put across, to hand over: tradition, treason, traitor.

Trah-ere, tractum, to draw (tractare, to draw up and down, to handle): tract, attract, contract, extract, trace, retrace, entreat, portrait, train, treatment.

Trem-ere, to tremble: tremor, tremble, tremendous.

Tribu-ere, tributum, to assign: tribe, attribute, contribute, distribute.

Turba, a crowd, confusion: disturb, disturbance, turbulent, turbid.

Unda, a wave: abundance, undulate, abound.

Unus, one: unit, unite, unity, union, universal, uniform (*forma*), unanimous (*animus*).

Uti, usus, to use: use, utility, usage, useful, utilization, unusual, abuse.

Vad-ere (invadere, invasum), to go: invade, invasion, evasion.

Vale-re, to be strong: valour, valiant, invalid, avail, prevail, prevalence, value.

Veh-ere, vectum, to carry: convey, conveyance, vehement.

Velle (volo, I am willing), to be willing: volunteer, benevolent, voluntary.

Veni-re, ventum, to come: event, invent, advent, prevent, adventure, inventory, invention, venture, venturesome, convenient, revenue, avenue.

Vert-ere, versum, to turn: convert, converse, verse, divert, inadvertent, traverse, version, vertical.

Via, a way: viaduct (*ducere*), obvious, previous, envoy, trivial.

Vide-re, visum, to see: vision, evidence, providence, prudence, provision, providential, view, visit, survey, envy.

Vinc-ere, victum, to conquer: victim, convince.

Viv-ere, to live, and vita, life: vital, survive, revive, victuals.

Voca-re, vocatum, to call: vocal, provoke, equivocate (*æquus*), advocate, vowel.

Volv-ere, volutum, to roll, to fold: revolve, revolution, volume, revolt, vault.

Vove-re, votum, to vow: devote, devotion, devout, avow.

II. DERIVATIVES FROM THE GREEK.

Angelos, a messenger: angel, evangel, evangelist, evangelical.

Anthropos, a man: philanthropist.

Archein, to rule: monarch, anarchy, patriarch.

Arctos, a bear: arctic, antarctic (*anti*).

Ballein, *to throw*: parable, problem, emblem, symbol.

Bios, *life*: biography (*graphein*), autobiography (*auto*), amphibious (*amphi*).

Chronos, *time*: chronic, anachronism, chronicle.

Cratos, *rule*: aristocracy.

Ergon, *a work*: energy, liturgy (*leitōs*, public).

Ge, *the earth*: geography, geology.

Graphein, *to write*, **gramma**, *a writing*: graphic, autograph (*auto*), biography (*bios*), paragraph, grammar, photograph (*phōs*, light).

Hieros, *sacred*: hieroglyphic.

Hodos, *a way*: method, exodus, period, episode.

Legein, *to speak* (*logos*, *discourse*): dialect, dialogue, catalogue.

Metron, *a measure*: metre, barometer, thermometer, diameter.

Pathos, *feeling*: sympathy, antipathy, pathetic.

Phanai, *to say* (*phemi*, *I say*): blaspheme (*blasphēin*, *to hurt*), blame, prophecy, prophesy.

Philos, *a friend*: philosophy (*sophia*, wisdom), philanthropist (*anthropos*).

Polis, *a city*: politics, polite, metropolis (*meter*, a mother).

Stellein, *to send out*: apostle, epistle.

Strophos, *a turning*: catastrophe.

Tropos, *a turning*: tropic, trophy.









